

Marine Corps Gazette

JUNE 1956

FORTY CENTS



Marine Corps Gazette

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COVER

The Marine rifleman, like a good many of us, probably doesn't realize the importance of his job. As LtCol R. E. Collier maintains on page 24, producing the end item — tactical capability, is the job of every Marine. Many of us fail to realize that we can help achieve that end item. If you have found a means of improving the weapons, equipment or techniques employed by the Corps, let it be known. Suggestions or recommendations should be addressed to the Commandant of the Marine Corps or the Director, Marine Corps Development Center, via appropriate channels. Remember, your contribution to the efficiency of the Corps can bolster the structure of the entire National Establishment. (Cover photo by Pfc R. P. Cole.)



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message center

On Character and Skill

... I have just read *By Character and Skill* by Mr. M. L. Bressoud Jr. in the April issue. It is the finest article on leadership that I have ever read. Through the years, I have taken and taught several leadership courses and never before has anything of this caliber come to my attention.

One of the problems that Mr. Bressoud brought to light has a bearing on Col Williams' article on Mess Night. The dispersion of interests that is caused by the officers and men living out in town is an excellent reason for Mess Nights. We had our first here at the Academy last month and it served the excellent purpose of bringing all the Marines closer together. It would be even more important for a battalion stationed here in the States to have these Mess Nights at least once every other month. This procedure should help immeasurably to give the officers a sense of belonging to a unit 24 hours a day, 7 days a week.

CAPT R. G. HUNT, JR.
Annapolis, Md.

... I noted with interest the manner in which Mr. Bressoud incorporated the administration and supply aspects of the responsibilities of the rifle company commander into his article *By Character and Skill*.

In addition to saying that I think these functions were analyzed in their proper perspective, I would like to offer the following comments:

a) I was impressed with the fact that these items were being discussed as being part and parcel of, rather than adjunctive to, the functions of command for which the commander is responsible. Delegation of authority was encouraged, but the commander was cautioned that he still must exercise appropriate managerial supervision. This is a decidedly more healthy approach than the frequent attitude that, these are mysterious evils which are to be given the commander's attention only when it is convenient, or (what is worse) to have an undue amount of attention because of unwarranted fear of delegating.

b) In his discussion of the inventory of property upon assuming command, I think it should be pointed out that this inventory should include all items

authorized for the company, rather than only the items appearing on the receipt. (Items of less than \$25 unit value will not normally appear on the receipt.) The CO's responsibility for these minor items is the same as for other items to some degree — e.g. "for want of a shoelace etc."

c) The echelon of command which effects changes in company commanders (normally the battalion) should allow time for the details of proper inventory of property to be accomplished prior to effecting the changes. All too frequently, the assignment order is cut, the old CO is whisked off to another job, and the new CO is left with the task of reconciling the property inventory alone. Sometimes, in the press of other things this does not get accomplished. In other cases, false shortages are reported arbitrarily and the old CO, not being present, is charged with explaining discrepancies that probably would not have existed if he had been there to protect his own interests.

d) In addition to the rifle company, I think the article and the comments above are equally applicable to other company-size units.

MAJ B. H. SNYDER
Camp Lejeune, NC
Ed: Both the US Military Academy and the US Naval Academy have requested permission to reprint *By Character and Skill* and use it for instructional purposes. Permission has been granted.

Affidavits

... I spent 6 weeks at Quantico last summer in the T&T Regiment. After reading LtCol Carey's article *No Place for Weaklings*, I can only say AMEN!!! I hope that somehow his excellent advice is acted upon.

MIDN. 1/C R. H. STABLEFORD
Ann Arbor, Mich.

... A hearty *Well Done* to LtCol Carey on his article in the April issue. If ever a subject merited attention from our planners, the subject of physical conditioning qualifies as being at the top of the agenda. Not only does good physical conditioning prepare a man for combat, but it also gives him added zip and zest when performing routine duties. A healthy appetite appears and there is less apt to be gripes about the "lousy chow." It's amazing how physical

exercise can make food taste so good.

I firmly believe that the lack of the physical fitness in our non-field personnel can be attributed to the pogey-bait soft drink vending machine and the Mobile Canteen. At my last duty station I had occasion to interview every commanding officer and some senior NCOs concerning re-enlistment problems. Without exception they were all of the opinion that many Marines are not sold on the Corps because the Corps has not made it tough enough on them, and due to their lack of hard physical conditioning their pride in being a *rough, tough Marine* has never materialized and matured. The senior NCO in one office had been observing his clerks, and prior to his putting his foot down, the clerks were consuming an average of 4 cokes a day plus numerous candy bars. Then they would skip the noon or evening meal, thus depriving themselves of good, wholesome food.

I think that many of us have observed a Mobile Canteen pull up to, or near a messhall and compete for the attention of the Marines, even during mess formations. Surely this is coddling of an extreme nature and not beneficial in any sense.

The Air Force is now inaugurating a program to strip overweight persons of their fatty burden, and it can never be said that the Army Chief of Staff, General Taylor, views poor physical conditioning with a tolerant eye. LtCol Carey has proposed a workable solution to our own problem, and I hope some action is taken *pronto*.

MAJ PAUL E. SANDERS
USS *Des Moines*

... I read with considerable interest LtCol Carey's *No Place for Weaklings*.

I certainly believe an article of this type was forthcoming, and Col Carey is to be commended for bringing to light the deficiency in physical training within the Marine Corps today. Although he presented the problem and recommended solution for the Marine in uniform, I think he overlooked the physical requirements of the man being accepted for that uniform.

The Army publication AR 40-115 (Physical Standards and Physical Profiling for Enlistment and Induction), is the universal guide for all services of the United States on the first enlistment. I believe that physical requirements as set forth may be adequate for the Army, Navy and Air Force but aren't necessarily high enough for the Marine Corps. In the Marine Corps a man is basically a rifleman. A man is acceptable with a profile 3 in one or all of the profile serial chart PULHES. I would like to know how a man, in spite



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of progressive physical development for 10 weeks could be expected to complete marches of from 8 to 15 miles in length if he is accepted with a profile 3 under P (physical capacity or stamina) which states, *Able to perform sustained effort for moderate periods* or profile 3 under S (Neuropsychiatric) *Mild chronic psychoneuroses. Mental deficiency, mild degree.* That man would not only be incapable of physical capacity or stamina but would probably give in to his physical discomfort because he wouldn't be able to comprehend the reason for it. In fact, I wonder how he even finished 10 weeks of progressive physical development. It is hard to feature a Marine as a good, trim, military man, an example of our country's finest fighting man, if he is allowed to enlist in the Marine Corps with a lateral deviation of the spine from the midline of from 1 to 2 inches.

From the *Navy Times* and other magazines carrying names of men retiring from the Marine Corps, I have noticed many Pvts and Pfc's that are retiring on physical disability, and from personal contact I know that in many cases the disability did not arise from 6 months in the service, yet some of these men earn retirement benefits that are even greater than an NCO that has put in 20 years of faithful service.

Now back to the scope of your article, Col Carey. Physical conditioning procedures should be rearranged in most units, at least most of the units that I have been in. Take the conditioning hike that periodically appears on the training schedule, only to be cancelled at the last moment. When it does come off, much to the surprise and bickering of most men concerned, the leader takes off at a high rate of speed and keeps it up until the hike is completed. This could hardly be considered *conditioning*. Maybe the OIC is in the process of marking fitness reports and needs a marking for section C, 17 (a), Endurance (Physical and mental ability for carrying on under fatiguing conditions). If you ever desire to know how many of your men are working at night just schedule a night march and see how many emergency requisitions and reports have to be ready for the morning mail. The same men will fall in for these hikes time after time and normally they are the ones that need the conditioning the least.

MSGT D. C. REEVES

Forest Park, Ill.

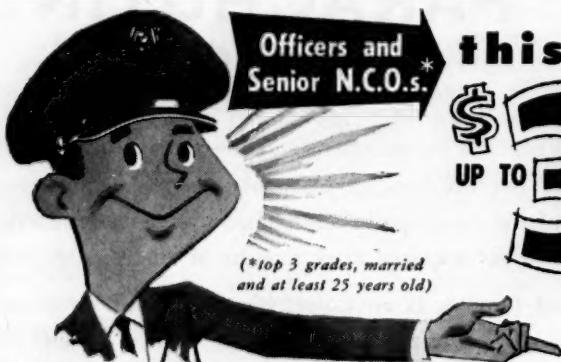
... LtCol Carey's article clearly states a serious problem. As he pointed out, an over-weight Marine is not only a potential liability but unrepresentative

in appearance too. I feel, though, that the Colonel omitted an important aspect of physical conditioning, and that is the *mental* aspect and stamina.

No matter what shape a man may be in, it is his amount of heart that will determine the extent to which he will push himself. His ability to endure is the measurement of his stamina, and stamina is not obtained by quantity of muscle only. The right attitude must be present if the muscle and conditioning is to be utilized to its utmost. Physical conditioning must include condition of the mind as well as the body.

This matter of heart, or mind, or whatever you will call it, seems often to be more important or equally as important as the condition of the body itself. I am sure we have all seen older men, and even fat men, keep up or exceed younger trimmer men who lacked desire. This is not a support of the obese and lazy, but an attempt to point out the importance of mental condition.

In addition to the suggested program that the Colonel includes toward the end of his article, I would add incentive or motivation for developing stamina. I think we should go further than setting standards; I think that the standards must be minimum satisfactory levels. They should be raised periodi-



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/	/	/	/	/

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cally so that men will have to continually give more to be satisfactory. This will put the man in a frame of mind that he not only has to meet a standard or goal, but that he must be able to go beyond that goal. Where a 15-mile forced march may be a minimum standard one day, the execution of an attack after such a march could be the standard the next day.

Stamina and physical condition is also a matter of pride in oneself. The leader knows that he must be able to do what his men must do, and then look fresh as a daisy afterwards. The men in turn, in the spirit of competition, will try to emulate and surpass the leader.

In conclusion I wish to enter an objection to the diet in Marine messhalls. The overladen tables, with their inevitable platters of mashed potatoes, bread dressings, gravy, etc., are not conducive to slim waistlines. I think that the best conditioned group of Marines I have ever seen were the Marines in Korea. Eating C rations, and not a full ration per day, seemed to produce a much tougher character than the messhalls of Camp Lejeune. The men had to work harder with less sleep on less food, and looked and performed better for it.

CAPT FREDERICK D. SINGER
Rochester, NY

... *No Place for Weaklings* placed emphasis on a subject which is actually (or should be) *basic* to every Marine. As I read his article I could easily remember practically every situation he cited in his many well chosen examples. I believe his recommendation to have a definite test for physical fitness both as part of the fitness report system and as a survey of the *actual* physical being of the Marine Corps is outstanding. Compliance with a directive is insured by a report and inspection and, therefore, if physical fitness became tested and reported, many deficiencies and *shortcuts* would be remedied.

The daily schedule at the United States Naval Academy, academically exacting as it is, provides for daily physical exercise from varsity teams to intracompany teams. After 4 years, physical activity becomes a habit and thus the Academy prepares a man physically as well as mentally. True, billets differ in the Marine Corps greatly but if a requirement is made to meet certain standards, a way will be found. This has been the case with many subjects and tasks. Why not with the physical condition of each officer and man?

CAPT F. D. LEDER
Jersey City, NJ

Marine Corps Gazette • June 1956

Reorganizing the Service Regt

... LtCol C. E. Warren's proposal on reorganizing the Service Regiment in the March issue was appropriate and constructive, and I agree with his analysis that the reorganization of 1954 was not a reorganization of the method of providing logistic support, but merely a grouping of all supply and maintenance functions in the Service Regiment—and that what is needed is a reorganization based on new concepts of amphibious operations as recently approved by the Commandant.

I would like to suggest, however, that a reorganization of the Service Regiment to support our new tactical concepts should take into consideration the possible assumption of shore party functions by the Service Regiment. We are shifting our focus from the beach to inland landing areas and we are contemplating handling lesser quantities of supply in a given period of time. For these and other reasons it appears to the writer that the time has arrived to take a hard look at the mission of our Shore Party Battalion, and at who can best perform its functions in an amphibious operation today.

Without the benefit of any staff study on the matter, I would like to suggest that the Service Regiment (organized generally along LtCol Warren's lines and with certain additional personnel and equipment) can assume the functions of our Shore Party Battalion, with increased economy and efficiency.

LTCOL THOMAS M. BURTON
Camp Pendleton, Calif.

... For years the organization of logistical support units has been subject to several *reorganizations*. Generally the organization can be classified as to its functional operation or as to its commodity grouping. In LtCol Warren's article *Reorganize the Service Regiment* is expressed an idea of which there is an acute awareness by those of us now serving in the Service Regiment. In order that your readers might not be left with the idea that LtCol Warren's essay was just an academic discussion originating with him and ending with its publication, I believe it is necessary to offer some further discussion.

With the development of new weapons and tactics it is reasonable to presume that thought has gone into the logistical problems of supporting those weapons and tactics. Although I am sure the 2d and 3d Mar Divs have also been concerned over their prospective effectiveness in the light of new developments, we in the 1st Mar Div have taken positive action in our study of the problem. The general concept has been to split the Service Regiment into

three support units each being capable of providing essential combat service support to an RLT or RCT. Whereas various type units have been conceived and tried out on LEXs and FEXs, the solution has not been clearly indicated. The basic problem now lies in defining *essential combat service support*.

Although the problem has not been solved, the study, trial, error and re-study will continue in the Marine Divisions and the Development Center until the solution is achieved. LtCol Warren has offered one solution; perhaps his article will produce others.

MAJ C. H. SCHMID
Camp Pendleton, Calif.

... *Reorganize the Service Regiment*, I hope will provoke more thought (and articles) on this often neglected subject. Reluctance on the part of many people qualified in the supply, support and maintenance fields seems to be the primary reason for the comparatively small number of articles submitted. So come on, you SDOs, supply officers, supply chiefs and anyone with a professional interest in the subject, let's kick this and more of the problems on service support around!

Yes, let's reorganize the Service Regiment! However, the reorganization of 1954 did more than *merely* group all the supply and maintenance functions. This reorganization made it possible to relieve commanding officers of the Motor Transport and Engineer Battalions of two problems that were (are) not compatible with primary missions. These two problems were supply and maintenance in support of the division as a whole. Remember our Motor Transport Battalion loaded down with a stock account and 3d echelon maintenance? The reorganization of 1954 certainly accomplished more than the mere transfer of these functions. The MT battalion is certainly more tactically organized because of it.

This is one example but I do not submit it as a justification for sitting back and looking upon the 1954 reorganization as a *cure-all*. Rather, let's look at it, accept some facts and proceed from there. The number one fact that has to be accepted is that the Marine Division may reach a saturation point on tactical organization. For an example, take our headquarters battalion; it is not tactically organized. The fact is apparent—we've tailored it to do a job and at present we don't hear of any big movement afoot to organize it tactically. We accept our headquarters, with minor changes here and there, without it being tactically organized. Now, if one more organization in the division has to sacrifice tactical organi-

zation in order to remain functional — then let it be the service regiment.

If our present organization of the Service Regiment does not provide for the organization of major subdivisions for employment in support of major components of the division, then by all means let's take steps to correct it. But, we must keep in mind that any tactical organization that diminishes its functional qualities must be carefully weighed.

LtCol Warren's proposed Combat Service Support Company contains several elements that seem unnecessary. As an example, take the General Supply Maintenance section. I assume that the company would be in support of an RLT. Based on this assumption, how bad does an RLT commander need a General Supply Maintenance section? How many general supply items require maintenance above the 2d echelon level? Not many — in fact very few rate even organizational spare parts. The bulk of our general supply items are a salvage problem once they exceed the stage where preventive maintenance applies. At a minimum, the organic section should be able to handle the situation without feeling the burden.

The exception to this is our shoe and textile repair teams. Their present organization, equipment and ability to deploy in support of major components of the division are sound.

I am not attempting to *knit-pick* at the proposed reorganization, but hope to bring home the fact that these are only *some* of the problems that must be weighed in the reorganization of the Service Regiment.

In conclusion, I say let's reorganize the Service Regiment — carefully; do not sacrifice the functional qualities of the various elements solely for tactical organization. Consider each service element and send the RLT commander an organization he *needs* and is capable of controlling within the framework of his organization.

Let's see more articles of this type.

1STLT J. F. GOODSPED

Camp Pendleton, Calif.

Orientation

... It was gratifying to see 3 *Whiskey Tango* Aircraft of VMF-232 adorning the cover of the March issue. However, their placement at Cherry Point, NC misses the mark by some 5,000 miles. As a component of the First Provisional Marine Air-Ground Task Force, these FJ2s are stationed at MCAS, Kaneohe, Oahu, TH. The Task Force is, incidentally, also *taking off on maneuvers*; a fact overlooked by your cover description. Considering its mission and composition the Task Force should provide

the major test of the overall Marine Corps concept of the air-ground team.

CAPT G. C. KLEFOTH

AirFMFPac

Flight Time

... Captain H. L. Wilkerson's *Your Son Can Be an Officer* — March issue.

Platoon Leaders Class (PLC) Aviation and Aviation Officer Candidate Class (AOCC) were not mentioned.

With all due respect to Capt Wilkerson's fine article, I feel certain that it was written prior to the initiation by CMC of 2 programs that lead directly into flight training and the gold wings of a Marine Corps Aviator.

As a Marine Corps Officer Procurement Officer for nearly 3 years I have followed with an air of amazement the tremendous recent interest displayed by college men toward flight training.

Some two months ago HQMC initiated a somewhat new program which is known as PLC Aviation. What it means essentially is that now Procurement Officers for the first time, can enroll PLCs into aviation and guarantee college freshmen, sophomores and juniors that they will go directly to flight training as a second lieutenant upon graduation from college and commissioning; assuming, of course, the man can meet the physical requirements for flight. A PLC Aviation candidate attends both 6-week summer sessions at MCS, Quantico the same as a ground PLC (successful aviation candidates do not attend Basic School upon graduation from college and commissioning).

The Aviation Officer Candidate Course parallels the OCC program in that selected candidates (college grads) attend a 10 weeks screening course at Quantico. Upon successful completion and commissioning, AOCC candidates leave Quantico and report for flight training at NAS, Pensacola, Florida. The OCC candidates attend the Basic School after completion of the 10-week screening course.

CAPT W. J. SKVARIL

San Francisco

Combat Fatigue

... I quote from the Sept 1946 issue of the GAZETTE, "With this issue the GAZETTE reinstates its letters to the Editor Column with the confident belief that this should be one of the magazine's strongest features. The GAZETTE wants its readers to use these pages not only for comments and corrections of past articles but also as a discussion center for pet theories, battle lessons, training expedients, and what have you. This does not mark the institution of a 'Gripe Column' wherein an individual can snipe at existing rules and

regulations not to his particular liking. What is wanted are contributions designed to promote discussion on topics of professional importance to the Marine Corps policy and thought."

Recent issues of the GAZETTE have been filled with personal gripes about the uniform, promotion, liberty, inspections, current regulations etc. Since the paragraph above states quite clearly that the column does not mark the institution of a gripe column, it is suggested that if these letters are published they be placed under the heading "Gripe Column" in order to identify them for what they are, personal gripes, and that no fee be paid for publishing such letters.

Such letters serve no useful purpose since I believe that the Marine Corps is quite capable in determining what uniform to wear, who should be promoted, who should lay out clothing, etc. The payment of \$5.00 for such letters is an invitation to all Marines to continue to submit their personal gripes to a magazine designed to promote discussion on topics of professional importance to the Marine Corps.

CWO ALEXANDER WELTER, JR.

ED: We heartily concur!

A Champion for Witkowski

... Captain Haslam's criticism of the positions used in shooting indicates lack of experience and knowledge in the fundamentals of training men the intricacies of marksmanship and appreciation of the potency of thoroughly skilled riflemen in combat. I was therefore glad to read my good friend Capt Witkowski's rebuttal, for he is one of our outstanding rifle and pistol shots who has had ample combat, as well as competitive experience, to know whereof he speaks and whose opinion I respect. Since men have to be taught how to shoot, why limit their training to any one position? Why not let them become expert in all positions so they can avail themselves of whatever protection the terrain might offer!

This recalls a discussion I had with Maj Bleasdale of machine gun fame, during my sojourn in Nicaragua. He, out of a clear sky exploded with, "Fisher, I haven't seen one of your damned Expert Riflemen hit a gook yet." "Major," I said, "do not blame the men, blame their training; what you need out here are deer hunters." The bandits would wait in ambush, hidden in the bush on a turn of a narrow high banked trail and fire a volley and disappear.

"Anyhow, Major, you wouldn't want me to shoot at you, would you?" "Well, maybe not you," he replied. "And," I continued, "when you select your men

to go out on patrol, which do you pick, the unqualified or the most expert riflemen available?"

We have had some excellent qualification courses during my long career in the Marine Corps, the best of which was the old *Skirmish Run* in which we fired 20 rounds in all, starting at 600 yards and ending at 200 yards with a time limit for firing and running between each range. This was discontinued because it consumed too much time regardless of the fact that the men learned to fire with the peep sight as well as battle sight from 500 yards down. Another excellent combat training course was the *Surprise Fire Match* included in the 1913 National Matches. The match called for the competitor to stand at the ready, rifle loaded and locked and held with one hand in any manner desired by the shooter. He could fire in any position he desired upon the appearance of the target which was exposed for only 3 seconds. With practice, we learned to unlock, drop to the ground and fire — surprisingly most everyone else at Camp Perry did too.

The Surprise Fire Match was supposed to simulate a man walking along in the woods and upon the appearance of an enemy, suddenly drop out of sight and instantly fire in any position.

My own experience, shooting in every conceivable position, with and without a sling did not lessen my ability to instinctively fire at an opponent whenever the need for such would be my self preservation, my buddies and in defense of my country.

CWO MORRIS FISHER (Ret)
La Jolla, Calif.

Ed: *The record speaks for itself.*

CWO M. FISHER, US MARINE CORPS
World Indiv. Rifle Champion, 1923—Camp Perry, O.
World Indiv. Rifle Champion, 1924—Rheims, France.
Olympic Indiv. Rifle Champion, 1920—Antwerp, Bel.
Olympic Indiv. Rifle Champion, 1924—Chalons, Fr.
World Indiv. Prone Champion, 1923—Camp Perry, O.
World Indiv. Kneel. Champion, 1923—Camp Perry, O.
World Indiv. Kneel. Champion, 1924—Rheims, France.
National Free Rifle Champion, 1923—Camp Perry, O.
Visitors Indiv. Cup Match, 1924—Lima Peru.
International Rifle Team, 1921—Lyon, France.
International Rifle Team, 1922—Milan, Italy.
International Rifle Team, 1923—Camp Perry, O.
International Rifle Team, 1924—Rheims, France.
International Rifle Team, 1925—St. Gall, Switz.
International Rifle Team, 1928—Hague, Holland.
International Rifle Team, 1929—Stockholm, Sweden.
International Rifle Team, 1930—Antwerp, Belgium.
Olympic Rifle Team, 1920—Antwerp, Belgium.
Olympic Rifle Team, 1924—Chalons, France.
Pan American Rifle Team, 1924—Lima, Peru.
Marine Corps Rifle Team, 1913—Camp Perry, O.
Marine Corps Rifle Team, 1916—Jacksonville, Fla.
Marine Corps Rifle Team, 1919—Caldwell, NJ.
Marine Corps Rifle Team, 1927—Camp Perry, O.
Marine Corps Rifle Team, 1931—Camp Perry, O.
Marine Corps Pistol Team, 1931—Camp Perry, O.
Marine Corps Pistol Team, 1932—Quantico, Va.
USMC Rifle & Pistol Champion, 1931—Quantico, Va.
Distinguished Rifle Shot, 1916—Jacksonville, Fla.
Distinguished Pistol Shot, 1923—Quantico, Va.
Division Pistol Champion, 1923—Quantico, Va.
USMC Indiv. Rifle Champion, 1921—Quantico, Va.
USMC Indiv. Rifle Champion, 1931—Quantico, Va.
Navy Match (Standing), 1928—Camp Perry, O.
Any Rifle Match (Telescope), 1928—Camp Perry, O.
Winner of Matches at Sea Girt, NJ—1919.
Winner of Matches at Wakefield, Mass.—1927.

Marine Corps Gazette • June 1956

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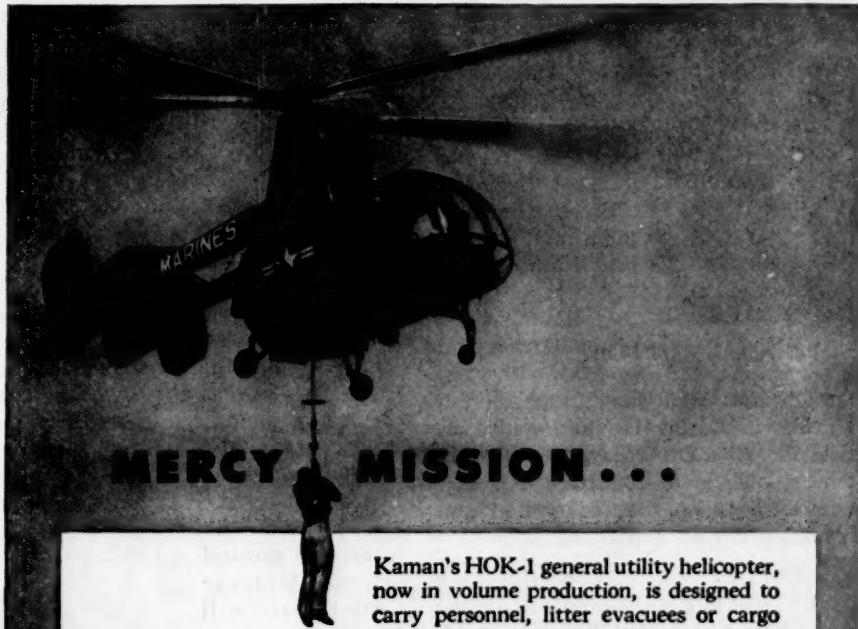
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• LtCol J. A. Crown's NAME APPEARS on the masthead this month in place of that of Maj D. M. Cox whom he has relieved. LtCol Crown is fresh from the FMF, and having just left the 1st Mar Div he is aware of all the latest thinking in the field. Along with his service experience (which includes a tour with the Historical Branch where he co-authored the monographs, *New Britain* and *The Marshalls*) he brings to the GAZETTE newspaper experience gained while serving as a reporter and then assistant City Editor for the *Atlanta Journal*.

One of Maj Cox's last official acts as Publisher was the writing of the editorial which appears on page 46 appealing for a greater interest and a revitalization of the Marine Corps Association. Upon being detached, he will report to El Toro as an air-ground exchange officer with the 3d Marine Aircraft Wing.

H/S

• IN EVERY PROJECT THERE IS ONE man who does the leg work. In the case of the recently approved Marine Corps drill, that individual was 1stLt John Phillip. He did most of the original

thinking on the project while in the 3 Section of the Training and Test Regt, Quantico. An alumnus of Boston University, he was commissioned in 1952 through OCC. Before coming to Quantico, he was a platoon leader and Asst S3 with, first

the 9th Marines in Japan, then the 5th Marines in Korea. His informative article *The New Drill* (page 32) was written "to offer an introduction to a new system, of which the background and reasons are very important."

• End Item: *Tactical Capability* (PAGE 24) by LtCol R. E. Collier, puts to use the author's experience while serving with the New Developments and Operational Evaluation Division, Office of the CNO. This article will serve to bring some light into areas in which most of us are uninformed when we vehemently ask, "Why don't they . . . ?"

In his 15 years' service in the Corps, the author has attended a total of 6 service schools among them being Field Artillery, Chemical Corps and Senior School at Quantico.

1STLT PHILLIPS

• LtCol E. B. Wheeler's EXPERIENCE IN the last months of the Korean war as a battalion commander and Regt ExO of the 5th Marines no doubt germinated the ideas he presents in *Mobile Defense For Marines* on page 10. His current assignment with the Advance Base Problem Team, MCS is one of those in which Marine officers grapple with such problems as these which may face us in the future.

Before joining the ABP and after returning from Korea, LtCol Wheeler was a student and then an instructor at the Senior School.

Commissioned in 1941, he attended the 5th ROC and

thereafter joined the 1st Raider Bn, serving with that unit until its deactivation in 1948. He returned to the US in 1944 to instruct at the Basic School and then attend the Command and Staff School at Quantico. Between wars he served with the 1st Mar Brig and the 1st Mar Div, later going to HQMC as an Asst G4. Service in WWII and Korea has earned him the Silver Star and 2 Legions of Merit.



LTCOL WHEELER

• *Prepare For Instruction* by Maj C. R. La Plant (page 28) is the Major's second contribution in recent months. His previous article *Guided Missiles* appeared in the April issue. His current assignment is as a Marine Corps Development Center Liaison Officer with Board #4, Special Weapons Development, CONARC, Fort Bliss, Texas.

• Major R. M. Hunt IS FAST GAINING a reputation for tossing out hot little embers for professional thought. If his article *All-Weather Air Defense* (page 22) brings as much reaction from the

aviators as his recent article on the helicopter brought from the ground officers, Message Center space will be at a premium. At present Maj Hunt is an instructor with the Air Sec, MCEC, and prior to that he was with the 1st Wing in Korea. One of our many Marine aviators who also saw service as a ground officer, he was with the 1st Tk Bn in WWII before going to flight training. He holds 3 DFCs, 11 Air Medals and a Commendation Ribbon.



MAJ HUNT

• THE AUTHOR OF *Change of Station*, Maj L. L. Graham, knows whereof he speaks since he spends his working day moving officers from place to place. He is the Head of the Planning and Distribution Unit, Officer Co-ordinator Section, Detail Branch, HQMC. This unit, among other things, is concerned with budgeting and justifying funds for the permanent change of station of officers and making recommendations for plans and policies affecting assignment. The article is on page 42.

• *Let's rethink our movement from Ship to Shore* (page 34) was written by LtCol T. M. Burton who states, "Our ship-to-shore procedure is a subject we definitely do need to do some thinking and acting on."

LtCol Burton is with the G4 Section, 1st Mar Div, Camp Pendleton, Calif.

• Captain E. J. Paradis uses his present assignment as an instructor at the Basic School and his background as an NCO to present his ideals on professional education for Marine noncommissioned officers.

He served as an enlisted man all during WWII and was commissioned through the Meritorious NCO Program in 1948. He holds the Bronze Star and Purple Heart among other awards.

• ONE OF OUR REGULAR CONTRIBUTORS, Maj Reginald Hargreaves, MC (Military Cross), British Service, Retired, has offered another piece this month which most everyone should find interesting. *Gilding the Pill?* on page 48, is one of his typical historical essays with a subtle moral on a problem which still faces us in our training and readiness today. Old Soldier Hargreaves (Empire service in India and Egypt; WWI service—France 1914, Gallipoli 1915, France again where he was awarded the MC and mentioned in Dispatches and then seriously wounded in 1918 resulting in his being invalidated out of service in 1921) draws on history and his experience to sharpen his point. He modestly, however, claims only one distinction of which he is reasonably proud, "—the fact that as an adjectival 'Brass-hat,' I managed to get myself seriously wounded; sharing a 5.9 with my Divisional General. At the moment, we are both alive to tell the tale." Maj Hargreaves is living in retirement at Beech Cottage, Wootton St. Lawrence, Nr Basingstoke, Hants, England—his family home.



CAPT PARADIS

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MOBILE DEFENSE FOR MARINES

Today's tactical doctrine recognizes 2 general types of defense. One is the position type. The other is the mobile defense. The mobile defense is by far the more dynamic, aggressive and audacious manner of accomplishing a defensive mission. The commander who adopts a mobile defense disposition definitely decides to execute his mission by offensive action. This fits the pre-

scription of Clausewitz when he says, "A swift and vigorous transition to attack — the flashing sword of vengeance — is the most brilliant point of the defensive."

There are 2 main features to the mobile defense. The first is to push out a shield, using the smaller fraction of the force, in order to impede, canalize and gain information of the advancing enemy. The second

feature is to withhold a greased lightning bolt in the form of the major portion of the force, in order to strike the enemy a decisive blow at a place and at a time of the defender's choosing.

In the position defense, on the other hand, we adopt a more static attitude. Here we place the major part of our force on selected terrain, integrate their fires, dig them in,

**It provides a means of swift and vigorous transition to the attack,
a factor of vital importance in this era of modern atomic warfare**

By LtCol E. B. Wheeler

and hold out. Counterattacks, when launched, generally seek no larger objective than restoring the battle position.

A figurative differentiation between the mobile defense and the position defense can be made if we first conjure up a vision of a Roman legionnaire with his large and heavy shield and his short broad sword. He represents the immovable position defense. Then visualize a mounted knight of the middle ages carrying a relatively small buckler and armed with a long 2-handed sword—he is a symbol of the mobile defense.

The concept of mobile defense is not a new one. Writing during the period between WWI and WWII, Field Marshal von Leeb of the German General Staff made these points in his well-known paper entitled *Defense*:

"New weapons and devices, the mobile land formations, the air force, the extensive use of obstacles, the utilization of chemical means multiply the efficiency of defense. They make it more mobile and get rid of the linear and rigid forms of war of position. Thus, defense can be articulated in depth and it is made less apprehensive of the danger on its flanks. These new means diminish also the need for direct flank protection and support, they lessen the risk of operative gaps, since the defender can quickly resort to countermeasures and counter-attack. He enjoys greater liberty of decision and greater initiative in use of his reserves. If the commander of an operative defense can make use of mobile land formations and powerful air forces in front of his dispositions and on his flanks, while at the same time erecting operative obstacles, he finds himself able to look forward with more confidence to a battle waged against a superior enemy."

Forms of the mobile defense have been applied in past wars, particularly where formidable water obstacles lay across the front of the defender, thus definitively canalizing the attacker's advance. Lacking such

major obstacles, however, the vast majority of defensive battles have been fought with variations of the position defense, using "two up and one back." The large scale use of atomic weapons and helicopters, though, may not make the selection of a type of defense wholly contingent upon the accident of terrain. Modern mobile defense can well become commonplace. It will not replace the position defense, but it may be adopted more often than it has been in the past.

Historically, there are no recorded instances of Marine Corps organizations executing a mobile defense in combat. The types of missions have not required it. In the past we have carried out assigned defensive missions by means of the position defense. New concepts of warfare, new developments and capabilities may change this traditional linear picture of defense. Modern mobile defense can be the replacement.

Recently, the theory of mobile defense has gained in importance. The impetus behind the increasing interest in this type of defense is caused by the present wide-spread awareness of the potentialities of atomic warfare, and the new means available for achieving a high order of mobility and flexibility. The latter point, of course, has its foundation in our adoption of the helicopter as the primary means of tactical transportation. Improvements in our amphibian tractors which enable them to be used cross-country as armored personnel carriers, contribute to our capability for rapid and protected maneuver.

Other significant factors which enhance our ability to execute a mobile defense are the gains in effectiveness of our communications and electronics devices—and our emphasis on the Marine air-ground team. These factors are conducive to the conduct of rapidly unfolding operations carried out by relatively widely separated units. Such characteristics are basic to the mobile defense.

The mobile defense emphasizes maximum mobile combat power in

preference to integrated organization (position defense) of the ground. In selecting the type of defense to adopt, assuming there is a choice, the commander must weigh certain considerations which will lead to his decision. Let's take the case of the commander of a Marine air-ground task force faced with the making of such a decision.

We'll assume that his task force is composed of a Marine division and a Marine air wing, plus suitable supporting troops. The predominant capabilities of this force are offensive in nature, but they can be applied defensively as well. These capabilities are: first, that the air-ground task force has the organic means of delivering atomic weapons; second, that it can rapidly exploit atomic or conventional fires over a large area by moving the bulk of its ground combat units simultaneously, using a combination of helicopters, amphibian tractors and trucks; third, that its air component can control the air space over the zone of action and effectively support these operations by close air support.

What are some of the considerations which influence a determination of the type of defense to adopt, for a force of this nature? A discussion, by no means exhaustive, follows:

1) *The mission.* If the mission is restrictive, pinning us to the defense of a specific terrain feature such as a city or ridge system, a position defense may be mandatory. If the mission permits more latitude, i.e. the defense of a zone or area, the adoption of a mobile defense becomes feasible. In the event the mission is not restrictive and permits the battle to be fought in depth the composition and characteristics of the Marine air-ground task force are conducive to the assumption of the mobile defense. It can conduct operations over an extensive area. The range of its troop carrying helicopters and surface personnel carriers will enable it to conduct the defense within a zone scores of miles from the periphery of a vital area. By this method, a tightly drawn, articulated

and linear type of defense, which is susceptible to targeting for atomic attack, can be avoided.

2) *Terrain and weather.* If the terrain and weather are not conducive to ready maneuver by the defender, then the position defense is desirable. Conversely, where the terrain and weather facilitate maneuver by the defender, the mobile defense becomes practicable. The consideration of terrain facilitating maneuver should generally be on the credit side of the ledger for the Marine air-ground task force. For wherever we can find terrain upon which to land our helicopters, the terrain will facilitate our maneuver. Continuing improvements in the all-weather flying characteristics of our helicopters should diminish the limiting factor of weather considerably. Also, waterways normally considered as obstacles are negotiable by our amphibian tractors.

3) *Relative mobility.* To adopt the mobile form of defense, the defender's mobility must be superior to the attacker's. This is the crux of the matter. The defender who is inferior in mobility would be hard put to execute a mobile defense. The air-ground task force commander should be generally at an advantage in this respect, since mobility and flexibility are essential characteristics of his organization.

4) *Air situation.* In order to exploit his superior mobility, the defender cannot be greatly affected by the activities of enemy air. Thus, a favorable air situation for the defender is necessary in arriving at a decision to adopt a mobile defense. Enemy air superiority would, in general, dictate the selection of a position defense. Inasmuch as the air-ground task force possesses its own combat aviation, its problems of maintaining local air superiority are greatly simplified.

5) *Time.* In order to organize an effective position defense an adequate period of time, usually measured in days, should be available. The lack of such a period of time for setting up a defense is a factor leading to the mobile defense. It appears to be fairly well established that the tactics of atomic warfare will necessitate rapid and relatively continuous movements. Such circumstances will militate against the

preparation of extensive positions necessary to the conduct of the position defense.

6) *Enemy atomic capability.* If the enemy has the capability of employing atomic weapons, the adoption of a mobile defense may be more desirable than a position defense. This cannot be an over-riding consideration, however. Assuming that the enemy may drop one on us, it follows that unit separation is mandatory. But the necessity for unit separation does not automatically dictate the need for mobile defense. Under some circumstances an extended variation of the position defense may prove to be effective. As a general rule, well dug-in troops with overhead cover will fare much better against atomic effects than troops moving in the open or assembled in poorly protected bivouac areas. In adopting the mobile defense, this risk of the enemy's ability to seriously impair the effectiveness of our initial dispositions and subsequent maneuver must be carefully calculated. This consideration, then, does not stand by itself and must be weighed against the preceding considerations — particularly that of mobility. For even though atomic weapons are not a factor in determining what type of defense to adopt, the factors of relative mobility and air superiority should be the final determinant.

7) *Quality of troops.* To successfully execute a modern mobile defense, entailing the exploitation of atomic fires by vertical envelopment and rapidly moving surface forces, will require the utmost in training and skill on the part of all participants. If his troops do not meet these standards the commander may tend towards the position defense where a higher degree of control can be assured. This consideration should be of little moment to the Marine air-ground task force where skill, leadership, training and teamwork are basic qualities.

Let us now consider the formulation of a concept for a mobile defense under conditions of atomic warfare. There are 3 parts to such a concept which are germane to most situations. They are: first, the type and location of the forward defense positions; second, the selection of the battle area in which the defend-

er will seek a decisive engagement; third, the distribution and organization of the defending force. We will discuss these topics in the order given. It should be understood, however, that this sequence is not significant. For it is conceivable that a commander might first select the area for a decisive engagement (battle area) which will then govern the location of his forward defensive positions.

Current doctrine divides forward defensive positions into 3 types — islands of resistance, strong-points and observation posts. They can be employed in combinations of any 2 or all 3.

The island of resistance is established where the commander decides that a vital piece of terrain must be held in order to facilitate the overall scheme of defense. The garrison of the island of resistance then, in effect, establish a position type of defense. As a general rule, the size of the garrison in an island of resistance should be a reinforced regiment in order to control a sufficient amount of terrain to permit effective aerial resupply in the event that it is surrounded. The chief disadvantage to such an island of resistance is that the force committed to its defense, even though it may employ internal unit separation, becomes stationary, which facilitates targeting for atomic attack. Since it would take approximately one third of the infantry strength of a division to man an island of resistance, which would block only a portion of the forward zone, it is improbable that a one-division force would establish such a sizable single position in adopting a mobile defense. This type of forward defensive position would be more applicable to a Marine air-ground task force of several divisions. Therefore, this discussion, which is illustrative of a one-division one-wing force, contemplates the strong point as the largest forward defensive position.

Strong points are tactical areas normally garrisoned by units of up to reinforced company size, or in some cases may comprise a battalion. Units committed to strong points are expected to withdraw to rearward positions in accordance with the overall plan of defense, when placed under sufficient pressure. The

retrograde movements of these small groups are the key to success of the mobile defense. It is upon their skillful maneuvering and accurate reporting that atomic target acquisition will largely depend. Air photography and reconnaissance will certainly be important factors in target acquisition. But the onus will fall upon these small units to harry and harass the advancing enemy columns into concentrations suitable for atomic attack.

Observation posts are manned by small units of fire team, squad or possibly platoon strength. They are so located as to cover the gaps between strong points or islands of resistance by observation and patrolling.

The location of forward defensive positions depends on several factors. The most important of these is certainly the disposition and capability of the enemy to interfere with the establishment of the positions. For, as a general rule, it would not be wise to have to fight for terrain upon which to organize the forward de-

fensive positions. After weighing the enemy's location and attitude, and his capabilities for movement, the defender must next determine the most probable routes of advance of the enemy through the zone to be defended. In this respect he must not only consider routes of advance for ground forces, but he must also consider likely areas for landing zones as well as river crossing sites and beaches—if the enemy has an airborne, helicopterborne river crossing and/or amphibious capability. The enemy's ability to prosecute unconventional warfare must also be taken into consideration in siting the forward defensive positions.

Another important factor in selecting the location of the forward defensive positions is that of terrain. Like any other defensive position the strong point, or island of resistance or observation post, should be established on a terrain feature which is inherently strong. Characteristics of such terrain features would include obstacles to the front flanks and rear, poor armored ap-

proaches, good observation, concealment and adequate routes of communication to the rear.

A principal advantage of the mobile defense is that the defender retains the capability to destroy the attacking enemy force at a time and place of the defender's choosing. In evolving a concept of mobile defense for any given situation, it is advisable to establish for planning purposes the area most suitable for this decisive engagement. The delineation of such an area will be of considerable value in co-ordinating the planning for barriers, fires and the disposition and maneuver of the striking force. This area of decisive engagement can be called the battle area. The orientation of the battle area will be governed by assumed enemy axes of attack, as in any counterattack planning. Therefore, it must be kept in mind that the value of such planning is contingent upon the validity of the assumptions and consequently cannot be inflexible.

Characteristics of a battle area include the following:

1) A terrain compartment with good obstacles on its periphery, which will tend to "pocket" the advancing enemy. The optimum terrain compartment for a battle area will also contain natural obstacles running parallel to the assumed enemy axes of advance. This pattern of internal obstacles will tend to canalize advancing enemy columns and inhibit their mutual support and co-operation.

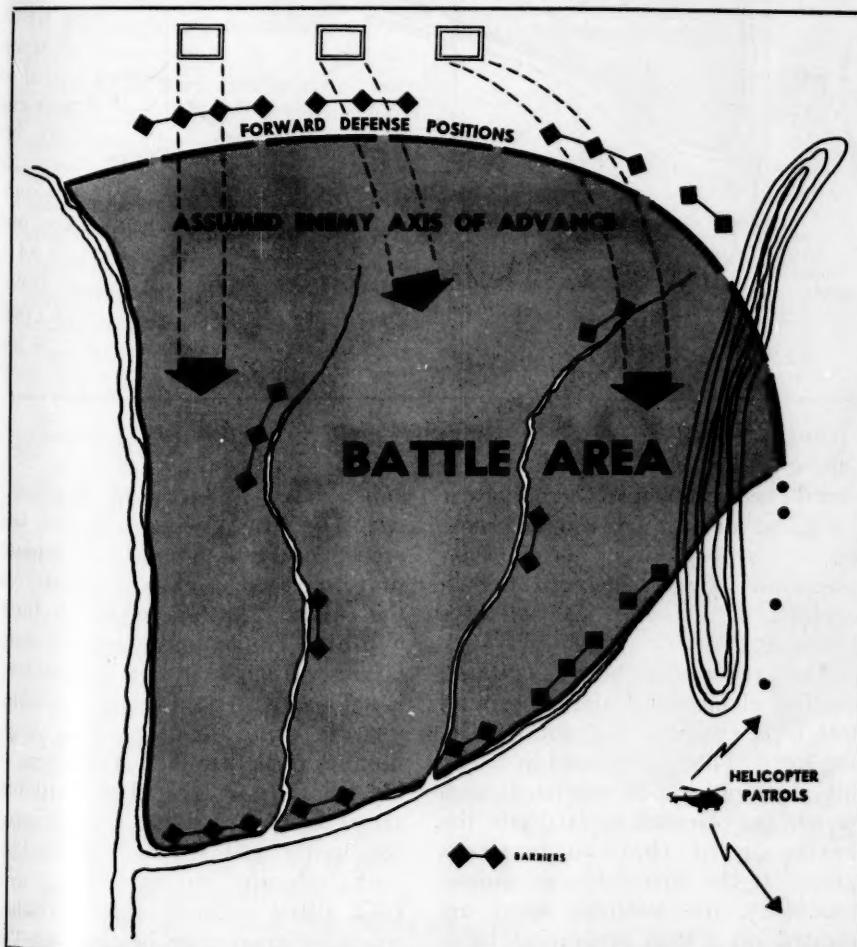
2) Terrain conducive to the application of atomic fires. The optimum battle area should be relatively level and free of vegetation, to preclude the shielding effect offered by cut-up terrain and heavy forestation. Also, within the battle area there should be some easily identifiable terrain features suitable for atomic aiming points.

3) Terrain suitable for the landing and operation of large numbers of helicopters. This characteristic complements the foregoing one.

4) Adequate routes leading into the battle area for the use of provisional mechanized and motorized forces which will link up with helicopter-landed elements.

5) The terrain compartment comprising the battle area must be of sufficient size to enable the enemy to

Battle area—barrier positions for the defending force

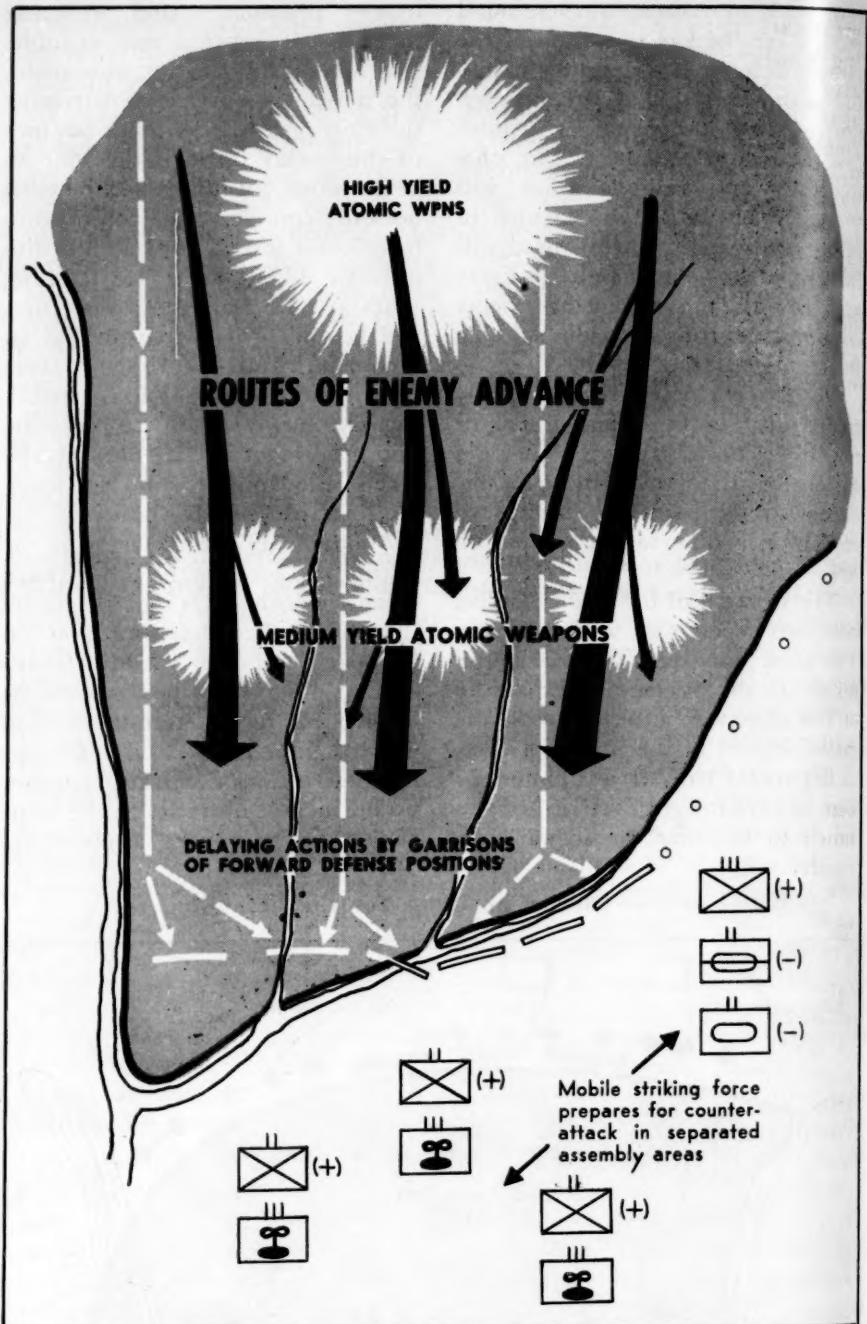


introduce a major fraction of his force, so that a truly decisive engagement can be brought about.

6) A co-ordinated barrier system should be incorporated into the battle area. Barriers can be divided into 3 categories: first, a line of barriers which will strengthen the obstacles on the periphery of the battle area; second, a system of internal barriers which will augment the obstacles running parallel to the enemy's axes of advance; third, the frontal barriers which will complement the forward defensive positions.

In the evolution of a concept for a mobile defense, we have now considered the forward defensive positions and the selection of a battle area.

The remaining major consideration of this concept is that of distribution and organization of the defending force. In determining the strength and composition of forces to be allocated to the forward defensive positions, we must stringently observe the principle of economy of force. To effectively implement the mobile defense, the bulk of our force must be held in reserve in order to constitute the mobile striking force. In most instances, therefore, 4 infantry battalions are the most which we should commit to garrison the forward defensive positions. If 4 battalions are employed in the forward defensive position, the problem of organization for combat vs unit (regimental) integrity arises. One method of organization would be to attach a battalion to a regiment, and make that regiment of 4 battalions responsible for the entire zone of forward defensive positions. A variation of this method would be to place the fourth battalion in the forward defensive position under division control, thus at the same level as the adjacent regiment. However, since frontages are normally extensive in the mobile defense, communications and control will be facilitated if 2 regiments, each less a battalion, are disposed across the front to man the forward defensive positions. If any tanks are to be committed to support the garrisons of the forward defensive positions, they should constitute only a small portion of the tank strength available. The bulk of the tank strength



Enemy penetration — placement of atomic fires

should be held in reserve. All of the light and medium artillery and some heavy artillery should be initially positioned where they can fire in support of the forward defensive positions.

The remainder of the ground combat elements of the air-ground task force comprise the mobile striking force. They are located in assembly areas outside of the battle area which are oriented to facilitate the execution of the counterattack plans. If the enemy has an atomic capability, the assembly areas are located on a unit separation basis,

and are no larger than battalion size. To attain a high degree of ready mobility, amphibian tractor units are sited in close proximity to the infantry battalions which they will lift. The assembly areas of battalions which will be helicopter-lifted are located on terrain suitable for the rapid loading of a large number of helicopters. Tank assembly areas are so located to facilitate access to selected routes leading into the battle and which will enable tank columns to marry-up with LVT lifted infantry units enroute. Assembly areas must be chosen with

great care, the overriding factor being passive defense against atomic attack. Concealment, shielding against atomic thermal effects, and combat deception are primary measures of passive defense. Individual foxholes with overhead cover must be the first order of business in the assembly areas. Where possible, assembly areas should be on or near defensible terrain features and organized for defense, to give flexibility to the overall plan of defense.

The flanks and rear of the zone of action must be screened by motorized reconnaissance elements. The effectiveness of their screening efforts will be greatly increased by the use of helicopters and observation aircraft. If contact has not yet been established to the front with the enemy, normal forward security echelons should be established in size and disposition commensurate with the distance to the enemy.

Let us now recapitulate this concept of mobile defense in terms of how a defense of this type might be conducted.

Since the enemy knows that we have an atomic capability, his attack will be governed accordingly. We cannot expect that he will launch an attack in mass under conditions of good visibility. Therefore we'll assume that he will commence his attack under conditions of poor visibility and across a wide front, initially employing infantry-heavy columns of battalion or possibly regimental strength. We must anticipate an atomic preparation if the enemy believes he has fixed our important dispositions.

Enemy columns, upon closing with the strong points, and observation posts, are subjected to the pre-arranged defensive fires of our artillery and then the fires of the heavy infantry weapons. Next, they must negotiate, under fire, the protective barrier system across the front. When the enemy is in a position to apply heavy close-in pressure against the forward defensive positions, the garrisons begin their delaying actions.

Throughout this initial contact and subsequent advance of the enemy columns, every effort is made by our withdrawing units, as well as division and air-ground task force collecting agencies, to gain informa-

tion of the advancing enemy. The common objective of these efforts is to establish the time and place where the enemy will present remunerative atomic target in the battle area.

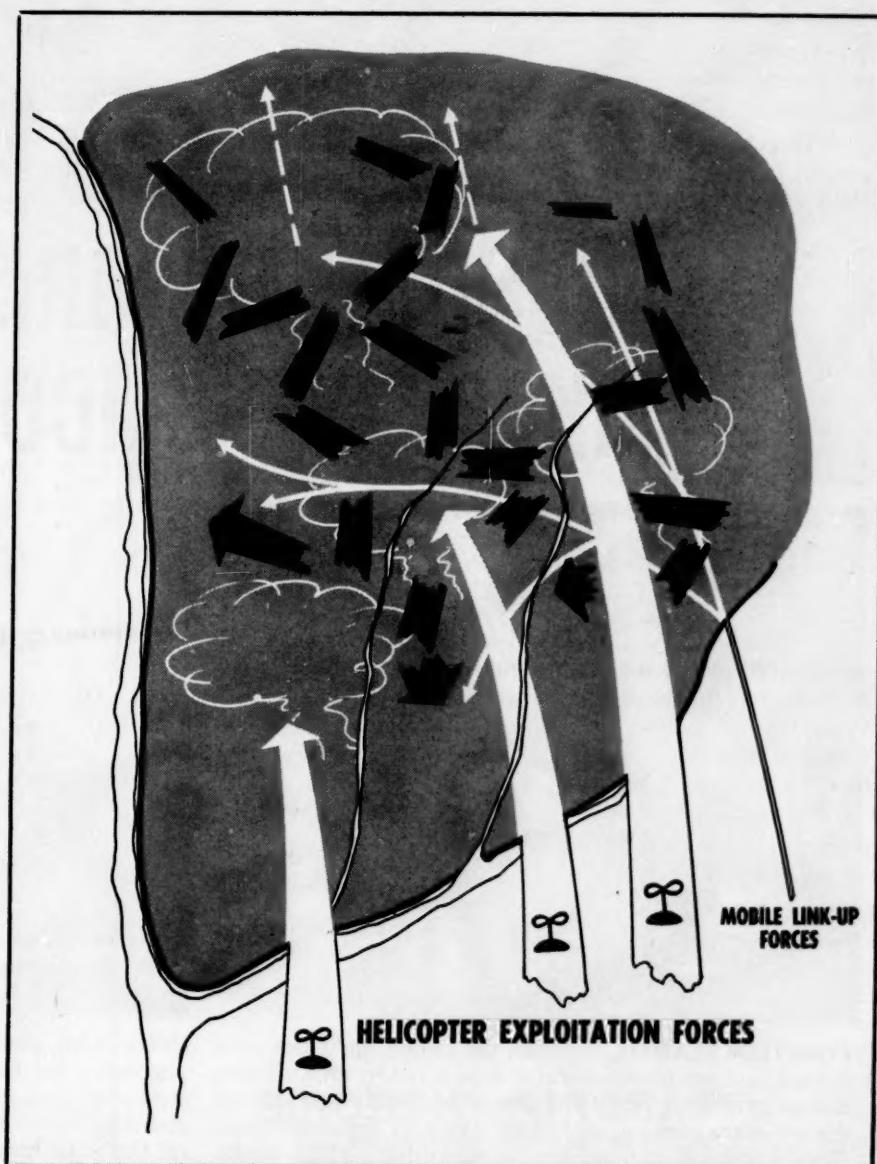
When the enemy has penetrated well into the battle area, his centers of mass there are subjected to heavy atomic fires, applied as nearly simultaneously as possible. Deep atomic fires beyond the battle area may also be desirable on units not yet committed.

Following the application of atomic fires on enemy forces in the battle area, helicopter-lifted infantry elements immediately exploit these fires by landing in the battle area. Supported by conventional artillery and close air support, they maneu-

ver against the now disorganized enemy units which were not affected by the atomic fires. A link-up with the helicopter-landed troops is then effected by the remainder of the striking force composed of LVT-lifted infantry and tanks entering the battle area through gaps in the barrier system.

The initial objective of the coordinated counterattack of the striking force is the destruction of all enemy forces in the battle area. Subsequently, if the engagement is indeed decisive, the air-ground task force may be in a position to assume the offensive. For as Clausewitz said, "A swift and vigorous transition to the attack — the flashing sword of vengeance — is the most brilliant point of the defensive." USMC

Counterattack — exploitation of fires by helicopter and link-up of striking force





IN-FLIGHT REFUELING technique for helicopters is demonstrated for the first time by two Marine Corps Sikorsky HRS helicopters. By increasing potential range and pay-

load, aerial refueling can give still greater versatility to the helicopter. The HRS is the Marine Corps version of the Sikorsky S-55, most widely-used transport helicopter.

AROUND THE WORLD WITH SIKORSKY HELICOPTERS



FOURTEEN SEAMEN, five from the bridge, eight from the fantail, and one from the water were saved by an Air Force rescue helicopter when the grounded Japanese freighter *Handa Maru* broke up in 40-foot waves off Honshu, Japan. The Sikorsky H-19 lifted men to safety despite high winds. Note man in rescue sling, circled.



LIFEGUARD FOR TEST PILOTS, Sikorsky S-55 recently purchased by Grumman Aircraft arrives at company's Bethpage, L. I., airfield. Grumman will use the S-55 as a stand-by rescue aircraft while testing its Navy jet fighters off the Atlantic coast. Grumman's S-55 has a 600-pound rescue hoist and flotation gear.



HELICOPTER HISTORY



FIRST HELICOPTER AIRMAIL

On May 16, 1943, at the Capitol, U. S. mail was carried by a helicopter for the first time, commemorating the 25th anniversary of airmail. The Sikorsky R-4B was flown by Capt. (now Brig. Gen.) H. Franklin Gregory. Sikorsky helicopters now carry not only mail but freight, express, and passengers in regular daily service.

ANTI-SUB SQUADRON HS-5 is first Navy unit being completely equipped with 14 large Sikorsky HSS helicopters. Based at Key West Naval Air Station, the new squadron is first of a number still to be formed which will fly the HSS. Eight pilots and eight crewmen are shown above at Sikorsky Aircraft in Bridgeport, where they were checked out in their new aircraft. The HSS tracks submarines with sonar gear and can launch torpedoes or lay mines. The high-performance helicopter also serves with other armed forces and, in commercial versions, is scheduled for airline passenger service this year in the U. S. and Europe.



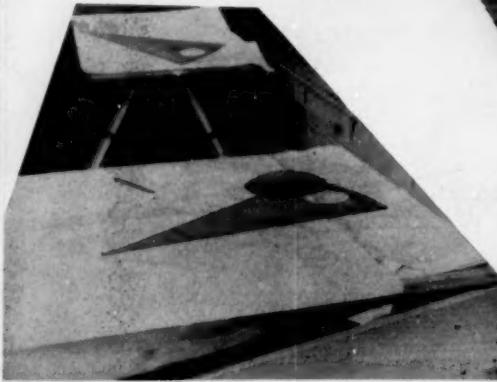
SIKORSKY AIRCRAFT

BRIDGEPORT, CONNECTICUT

One of the Divisions of United Aircraft Corporation

GIVE

THEM



PROFESSIONAL KNOWLEDGE

A BOARD, RECENTLY CONVENED at Headquarters Marine Corps, has had the most difficult assignment of selecting a few highly professional Marines from among many, for promotion to warrant officer grade. This board's assignment has been most arduous in that it has had placed before it some 5 to 8 years accumulated work. To make this assignment even more difficult, the yardstick of selection has been, to a large extent, the measuring of experience. Many of these applicants were to be measured solely on experience and letters of recommendation. Very few had ever been exposed to formal, organized, military schooling that would lead directly to furthering and measuring their professional ability. Theirs had been the school of experience, trial, error and hard knocks.

Hence, the need for specialist-type schools has long been recognized, and because the results could be measured immediately, it has been, to a large extent, satisfied. But what does the service offer the senior NCO in the way of expanding his general military professional back-

ground? In the past, it has been on-the-job—"emulate-my-seniors," and this has all too often been the extent of the development of leadership abilities. He can, we say, lift himself by his boot straps if he desires, by pursuing the correspondence course. But to obtain the time and the effort and to resist the temptation to procrastinate with such a self assignment soon reaches momentous proportions.

An objective analysis of our senior NCO training today, could lead us directly to the well known phrase about the road of experience being long, slow and expensive. With the exception of an occasional divisional NCO school and various specialists schools, the average noncommissioned officer has had very little opportunity presented to him to receive direct formal instruction that leads to ultimate success in his chosen profession. The road to success is usually pointed out to him, but with the exception of being shown where

it is, it is usually left up to him to get it for himself.

It would appear that this Corps of ours should be capable of providing these men who have given their service, devotion to duty and loyalty, with the greatest professional background of any service in the world. The benefits from such a program would be far reaching indeed. For example, the professional advancement of the senior NCO would have a most direct effect on the junior with less experience. In the event of war, where rapid expansion and promotions are paralleled by the call to arms, these well-qualified professionals would be in great demand and an asset to any organization.

If, before we are to act, we find it necessary to look to the past for a precedent, then there is written for our inspection, the rapid rise in the promotion of many to officer status. During the past wars, the persons selected have been the obvious leaders. However, these leaders have been the graduates of the long hard road of experience. Professional knowledge for these men was gained by daily contact, the as-

By Capt E. J. Paradis

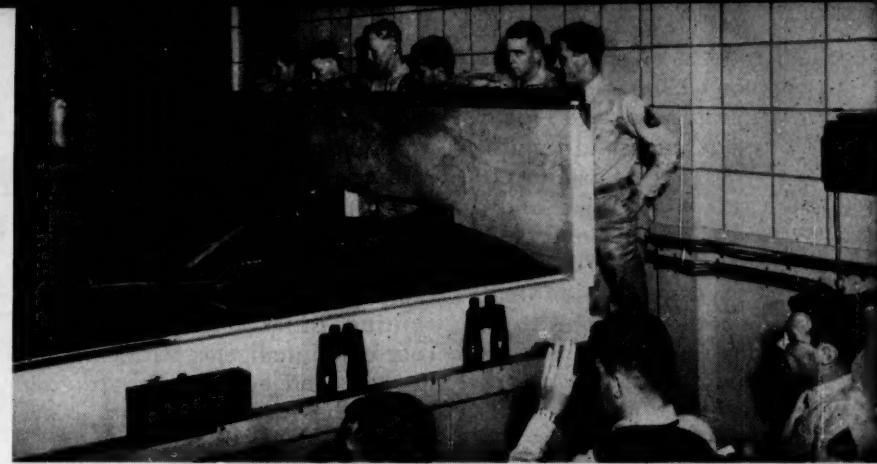
sembling of a jumble of informal schools, training programs and an occasional correspondence course. The record will further attest that these leaders have, by and large, turned in outstanding accounts of themselves. But think of the effort on the part of the individual. Imagine how often a better solution might have been arrived at by the employment of principles instead of experience. How many of the initial errors might have been eliminated with the result being a smoother, more efficient operation contributing positively to the larger effort at hand.

The need for an immediate program to further increase the professional ability of the senior noncommissioned officer is evinced by the fact that the wars of the past decade have left the average man long on experience, but relatively short on doctrine and theory. Although these qualifications alone set him apart and leave him without a peer anywhere in the world, he continues to thirst for the knowledge of the science of his vocation. Couple his present experience with professional knowledge and his position becomes unassailable.

A brief, uninterrupted course with emphasis on the art of leadership, tactics (basic officer level), intelligence and reconnaissance could be the formal education of these NCOs who, at any given moment may be expected to take command of a rifle platoon. They should be familiarized with a wide variety of subjects, but these that have been mentioned, they should master. In time of peace who would deny this meager request to our greatest source of unselfish loyalty?

One Marine Corps-wide school for advanced unit leaders would insure progressive, unified instruction leading to one school of thought. Such a program would be both authoritative and final in scope. This would not only enhance the program, but would build confidence in and increase the prestige of, the individual who successfully emerges from it.

In this day of cost consciousness, dollars are no doubt uppermost in all minds. There never has been a time when something good was obtained without effort or money, or both. It is certain that a maximum amount of planning will result in



intelligent spending, thereby keeping expenses to a minimum. Factors to be considered that would have to be resolved should include the following: 1) a careful selection of the location site; 2) a study of existing facilities and the utilization of any nearby instructional agencies to reduce the initial and the operational cost; 3) the development of a syllabus of less than 5 months to keep the course within the realm of temporary additional duty. This would reduce the expense of permanent change of station. In many of the courses, students can be utilized as instructors, thereby reducing the cost of a large instructor staff. A great and varied amount of instructor ability will be present from the student body itself.

By commencing the syllabus with a brief sub-course on the technique of instruction, all students would be assured of an equal footing. Then, under the guise of student application, the student body itself would be available to reduce the total paid instructor hours. In addition, this would generate student interest, and at the same time, recognize previous proficiency and ability in given fields. It would also provide an excellent opportunity for evaluation of the student concerned.

Another difficulty will arise when commanding officers of organizations throughout the Corps are confronted with the possibility of losing sergeants major, first sergeants and company gunnery sergeants for some 20-odd weeks. Not only would they stand to lose the services of these most competent people for the period involved, but they would return to them potential warrant officers and they would stand to lose them again. To the harassed CO, it would hardly seem worth the extra effort to educate these men. To as-

sign 300 to 350 senior noncommissioned officers each year from, and still chargeable to, organizations in the field would defeat the purpose of this program. Only the best fitted would be assigned to attend this program, for warrant and LDO status would be the potential of each nominee. A most careful selection program would be necessary to obtain the desired personnel. A probable solution could be along the following order: recommendation on fitness report by CO that upon completion of present assignment, if concurrent with convening of advanced unit leaders' course, subject NCO be assigned under instruction TAD enroute next duty station. In this manner, the loss of these personnel would not effect any unit but would be chargeable to HQMC and would be absorbed in the overall strength of the Marine Corps.

We sometimes hide behind the platitudes: "I didn't get mine that way—It's never been done before—We have got along up until now." It's never been done before—but it's been thought of time and again, first by the noncommissioned officer himself, and next by the persons that these eager men work for but who, all too often, have neither time nor facilities to train or to more than superficially assist them. But, a school, similar to the one proposed, has been developed by a sister service, for the filling of infantry billets. The US Army—recognizing the importance of the senior noncommissioned officer and, in an effort to increase his potential and remove any existing deficiency—has instituted several NCO advanced infantry courses. These courses not only immediately qualify the NCO, but one can read between the lines of the syllabus and see that an eye has been directed toward the in-

fantry platoon commander of any future expansion program. Finally, not only to determine and improve his own physical fitness, but to provide him with a yardstick and a mode of instruction, the noncommissioned officer is presented with Ranger instruction. Undoubtedly the advantages of such a highly organized, uninterrupted training program will produce NCOs of the highest caliber. The Infantry Schools syllabi are to be admired and their programs are all sufficient cause for a considerable amount of envy. However, envy on our part is not a solution to this problem, nor will it raise the standards of our present NCOs and warrant-officers-to-be.

It is believed that a probable solution as to location for this program would be the Marine Corps Schools. Where would it be more appropriate to locate this school of schools for enlisted personnel than at Quantico? There, we have available excellent facilities with training aids, terrain and an experienced instructor-staff to draw from. The regular school staff would be small and the permanent organization might consist of as little as a director and his staff; executive officer; plans and training officer and senior warrant officers functioning as platoon commanders. All officers would, in addition to regular duties, provide instruction for the various sub-courses delivered in the syllabus. Material presented in the syllabus might be allotted within the sub-course break-down

as follows: 1) tactics, both offensive and defensive, to include fire team, squad, platoon and company levels, plus employment of infantry weapons; 2) helicopter assault, amphibious operations and the effects of the atomic weapons on war; 3) live firing problems with students functioning in all capacities; 4) A course on intelligence with emphasis on map and aerial photo reading. This latter is most necessary, as evidenced by GMST, and is definitely a major weak point among many of our personnel today. Reconnaissance and combat patrolling, the functions and use of intelligence, in addition to an explanation of the POW code will make operations and intelligence chiefs for us where vacancies have existed. An inventory examination would disclose any weapons deficiencies and extra curricular instruction would bring all up to passing. Emphasis during the weapons sub-course should be placed on new equipment and its uses. This is to be accomplished by lectures, demonstrations and visits to various ordnance centers and proving grounds in the adjacent vicinity.

In addition to the already mentioned mode of instruction in the weapons sub-course, tours of local interest should be conducted. These should include guided tours of the battlefields within the Quantico area. Many Marines have, as yet, to see their first Sunset Parade, Marine Barracks, Eighth and Eye. Special lectures and advance problems con-

ducted at Marine Corps Schools should also be attended by these NCOs to broaden and enlighten them on these subjects.

A personnel and logistics sub-course would make for an immediate realization of the investment made in these students. This knowledge would enable them to be more competent and better qualified to assist in these fields, especially with the mountain of planning that both subjects encompass. A better understanding by a greater number will result in more and better solutions.

A general military subjects sub-course would touch all the various subjects necessary to rounding out more fully the background of our NCO. The object of such a sub-course would be to familiarize him, not make him master of all of them. In this classification could be placed such subjects as the supporting arms, tanks, artillery, air, engineering, field sanitation and naval gunfire. Physical conditioning, bayonet drill and hand-to-hand combat will put students in shape and provide them with physical tone prerequisite to executing applicatory phases of instruction.

Attending students should be made to feel a school atmosphere of seriousness without strenuous regimentation. Regimentation to instill discipline would be anticlimactic with this group and would antagonize them rather than furthering their instruction.

We can put elastique greens and tropical worsted uniforms on our noncommissioned officers and place swagger sticks in their hands, but the one thing that will make them dig in their heels when they walk, and make their voices ring with that quality of authority and pride, is professional knowledge.

Let us place at the disposal of our senior noncommissioned officer the means to a professional education and stop demanding that he get it for himself. Granted, that as in the past, he will continue to receive encouragement to assist himself; that operation "bootstraps" will always be with us. However, a program as discussed here, instituted at Marine Corps level, will demonstrate to the noncommissioned officer a positive interest from his seniors. He wants it — he needs it.

USMC



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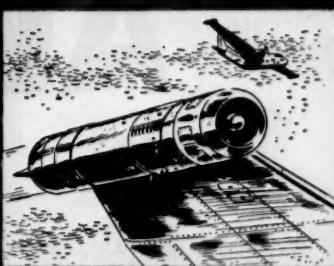
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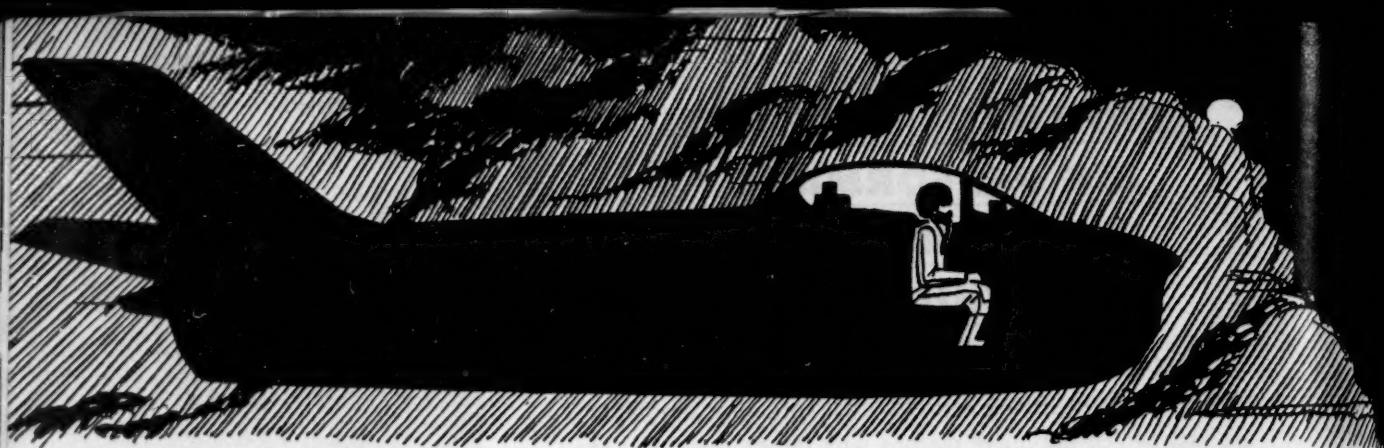


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ALL-WEATHER

What constitutes the ideal aircraft for conducting

IF MARINE AVIATION IS TO PROVIDE adequate protection for the air-ground task force in atomic age amphibious operations, it must obtain a satisfactory all-weather fighter.

The determination as to what constitutes an "ideal" aircraft for conducting counter air operations at night and in foul weather has been the stimulus for a seemingly unending discussion among that branch of the Naval aviation fraternity which experiences a particular delight in taking to the air under conditions which drive the feathered variety of birds to the shelter of their nests. The argument has resulted in the establishment of two unyielding schools of thought. One group recommends a single-seat interceptor, and the other advocates a 2-place Stygian flying machine.

Both have the same basic mission—to locate enemy aircraft through the use of airborne radar and destroy them. The methods they use differ sharply.

Before discussing the differences, it might be edifying to consider certain principles which pertain to all-weather operations in general. The purpose of armament-control electronics equipment is to permit the destruction of enemy aircraft, regardless of existing conditions of visibility or weather. Modern radar fire control systems are designed to keep the attacking fighter off the tail of the target aeroplane—both for the protection of the friendly aircraft, and because an all-weather

tail attack normally ends as a tail chase. In any electronically controlled pursuit, there are two distinct phases—the search and the attack. Accordingly, accurate assessment of the target course and speed must be made in the search phase, if the intercepting fighter is to be off the tail of the "bogie" in the attack. Transition from the search to the attack phase is a difficult procedure and also requires skillful maneuvering of the aircraft, if the fighter is to stay free from the dangerous tail cone of the target.

In the single-place interceptor, target detection and the search phase are accomplished by ground or shipboard radar installations. However, the pilot must effect the transition from search to attack, establishing a "lock-on" against the enemy aircraft at a precise range. Throughout the entire interception, the pilot's full attention must be directed to the radar scope. His only flight reference is an electronic artificial horizon, which appears on the scope face. Precision instrument flying under severe weather conditions is a fine art in itself. When it is combined simultaneously with a timed intercept, in which the pilot has only fleeting opportunity to use his gauges, it becomes a highly difficult maneuver. Accordingly, the experience and training of aviators as

signed to such work must be extensive.

In the 2-place version, the pilot is assisted by a skilled radar operator who constantly analyzes the combat situation and provides verbal instructions for conducting both the search and attack phases. Only in the final seconds of the interception, immediately preceding the kill, is the pilot required to divert his attention from the actual flight instruments of his aircraft. When a minimum range is reached, the airborne intercept operator transfers the locked-on target blip to the pilot's scope, and the "bogie" is splashed.

Because of the presence of the radar operator and the capabilities of the additional electronic equipment carried in the 2-place all-weather fighter, the aircraft does not experience many of the limitations imposed on its single-place counterpart. Its range and endurance permit it to seek out and destroy enemy raiders, independently and at great distances from its home base.

Herein lie the fundamental differences and the basis for arguments between proponents of the two types. Advocates of the single-place interceptor contend that the essential requirements of the "ideal" all-weather fighter are speed and rate of climb. They rely on its high performance characteristics to meet and destroy enemy bombers which penetrate the immediate area of the fleet or beachhead. Those favoring the 2-place version state that the all-weather

By Maj. R. M. Hunt



AIR DEFENSE

counter operations at night and in foul weather?

mission is too complicated to be completed successfully by the pilot alone. They believe that range and endurance are equally important to speed and rate of climb, and they consider the safest place to intercept an enemy threat is at a distance far removed from the friendly force.

The 2-place school points to the recent Korean conflict to substantiate its recommendations. In that conflict, Marine Fighter Squadron 513 flew more than 2,000 flights in F3D2 aircraft. These missions were either night combat air patrols or barrier patrols and escorts of US Air Force B29 bombers engaged in night strikes deep in North Korea. "Sky-knight" crews were responsible for the destruction of more enemy aircraft than any other Navy or Marine Corps fighter—day or night.

All missions by the F3D2 were flown at considerable distances from its home field. Other than navigational aid, assistance provided by ground radar stations was negligible. The inherent equipment of the aircraft, itself, enable the F3D2 to search, to lock onto a target and to detect enemies on its tail. The aeroplane thus established itself as being capable of operating independently and successfully at great distances from its base.

The current concept for Marine Corps amphibious operations involves helicopter-borne assaults against objectives on large land masses. Before such actions can be undertaken, air supremacy must be

established over an extensive area. Accordingly, the enemy will be forced to conduct his air attacks from bases considerably distant from the friendly landing zones. The most effective periods for such raids will be during conditions of darkness or inclement weather.

Effective air attacks against the task force beachheads will not require large numbers of enemy aircraft. The firepower of modern weapons has made the hazard of attack from a single bomber today as great as that presented by 100,000 World War II B17s.

Further problems in air defense have resulted from present-day limitations of ground and shipboard radar detection equipment. Because of a reduction in radar reflector surfaces on jet aircraft, as compared to propeller-driven types, incoming hostile air plots are difficult to establish. In addition, the high speeds of jet "bogies" have reduced, to a marked degree, the allowable time for fighter controllers to bring friendly interceptors to minimum or kill range of enemy bombers.

All of the foregoing serves to emphasize the threat of enemy air raids during darkness and bad weather. Thus, it would appear for adequate protection of beachheads and supporting carrier task forces, that an all-weather fighter capable of seeking out and destroying enemy aircraft at distances of 250 miles or more, is needed. Such a fighter must possess the ability to accomplish its

mission without assistance from ground or shipboard radar detection stations.

The F3D2 possesses the basic requirements and has proved the validity of its type in actual combat. It, however, does not have the speed and power which will be required to compete with enemy bombers of the future. Unless a successor to this worthy veteran is found, reliance must be placed solely on the single-seat interceptor for both carrier and landing zone defense. The inability of a single-place interceptor to search and track independently and its comparatively limited range and endurance place it at a disadvantage in providing complete protection for the amphibious force during the vulnerable hours of darkness and bad weather.

Actually, there is a need for both types. Paired, they make an ideal air defense team. If the 2-place fighter fails to destroy the enemy, it serves as an airborne early warning aircraft and flashes the alarm to the Counter Air Operations Center, which then vectors the single-place defender to the kill.

If, however, Marine aviation must settle on one of the two types, it would seem that the 2-place faction has the weight of the evidence on its side. Its characteristics and capabilities seem particularly fitted for providing effective all-weather air defense for the atomic age Marine task force and its supporting fleet.

USMC

AN ARMED FORCE'S POWER RESTS upon two elements: Its moral strength and its material strength. Moral strength may be created by a national spirit, esprit de corps, military education and discipline. Material strength is characterized primarily by the organization of forces, armament, tactical doctrine, training and logistic support. Tactical capability, in being, is the nation's shield.

Amphibious seizure, control of the sea and control of the air contiguous to naval operations are all recognized responsibilities of the naval services. They are basic to overseas offensive operations. The US Marine Corps, a naval service, must be adequately organized, trained and equipped for prompt and sustained operations of a naval character. The Marine Corps also has the inherent capability of performing many collateral functions. So it must be prepared to perform these various functions. Nevertheless, the weapon systems, tactics and techniques developed by the Corps must reflect its naval characteristic.

The development of the material

end item:

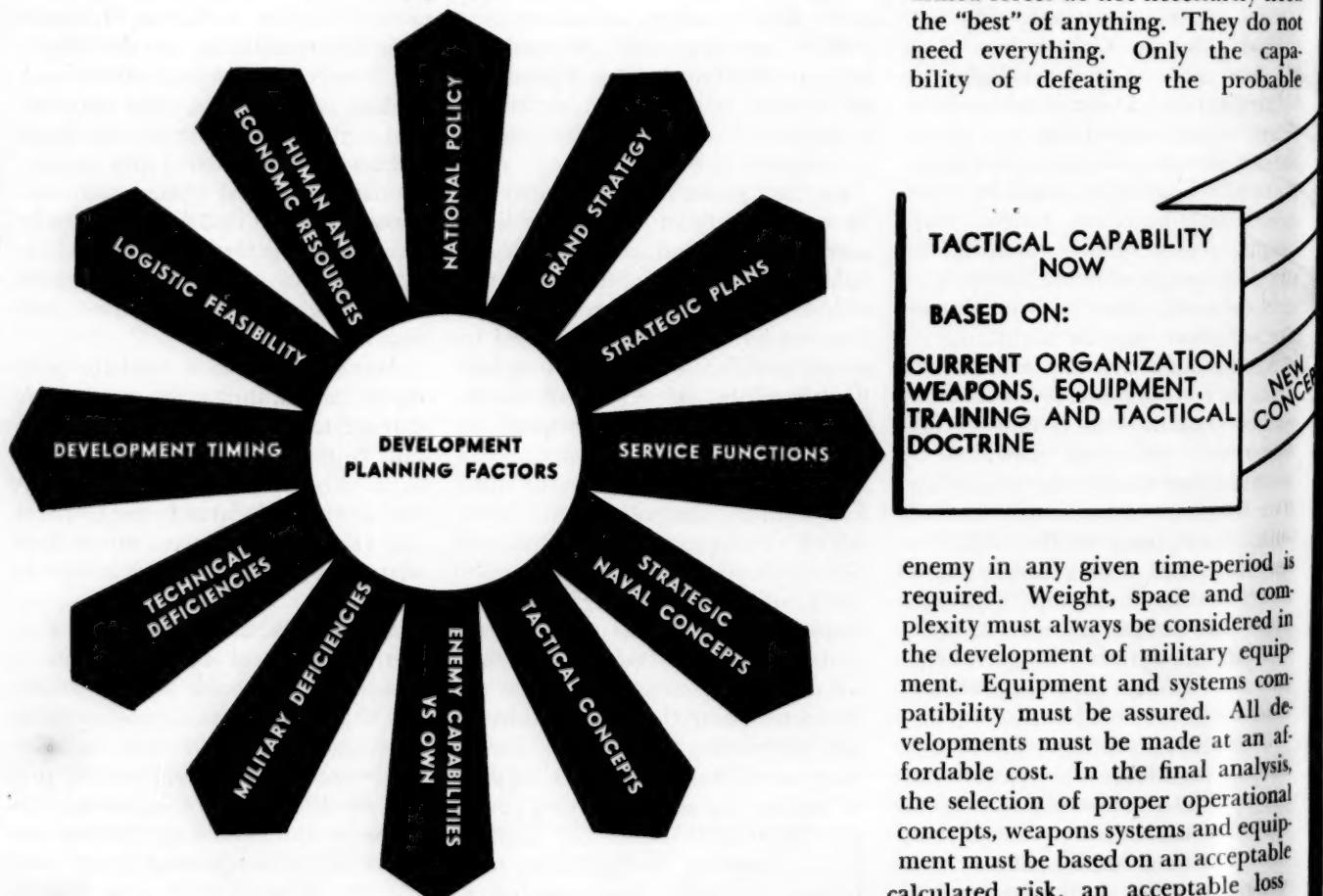
aspects of tactical capability is a logical process based on comprehensive development planning. Comprehensive development planning provides for the long-range analysis and integration of pertinent factors to determine the preferred weapons systems and techniques which will most effectively accomplish the naval function under probable future war conditions. The most important development planning factors are shown in Figure 1.

The point of departure for the development of new tactical capability is our organization for combat. This includes the tactics, techniques, weapon systems and equipment involved. It is here that the quality of realism is paramount. On the one hand, new concepts for future operations must be evolved and plans for new and improved weapons made. The conceptual military man is at work. On the

other hand, the capability of the Fleet Marine Force to operate under new concepts has not been developed. The practical military man must fight with what he has today! The Fleet Marine Force will not have a capability to operate under a new operational concept until the weapons and equipment needed for the concept are in the hands of the using troops, the troops trained to use them, and a sound tactical doctrine and organization for their employment is developed. Command is always faced with the necessity of overcoming weaknesses in the conventional model of an operation in order to fight today, while concurrently planning developments demanded by new operational concepts.

There are certain basic factors that must be considered in the determination of the operational concepts, weapon systems and equipment to be developed or improved. The armed forces do not necessarily need the "best" of anything. They do not need everything. Only the capability of defeating the probable

Figure 1



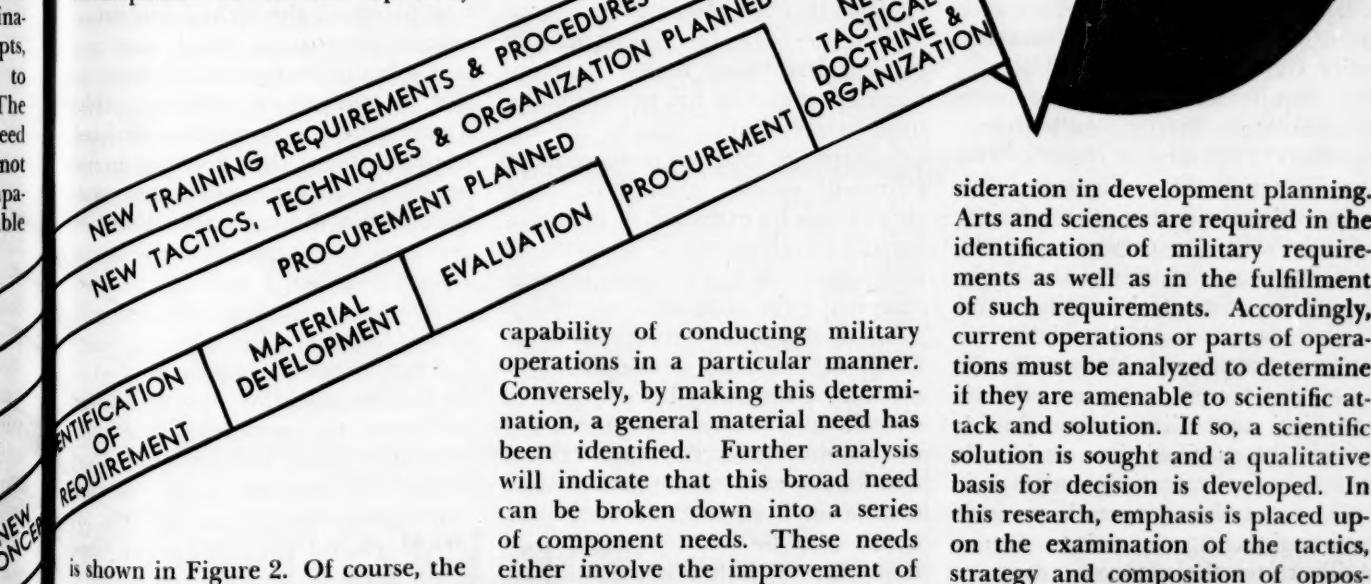
enemy in any given time-period is required. Weight, space and complexity must always be considered in the development of military equipment. Equipment and systems compatibility must be assured. All developments must be made at an affordable cost. In the final analysis, the selection of proper operational concepts, weapons systems and equipment must be based on an acceptable calculated risk, an acceptable loss

tactical capability

Military science is not an exact science. Therefore, the development of the essential end-item is the job of every Marine

probability and acceptable tactical performance.

The development of strategic and tactical operational concepts should precede material development. First, we develop a general notion or idea for the employment of our forces in future operations. Then we develop the weapons systems, equipment, tactics and organization required to translate the idea or concept into capability. A logical process for the development of tactical capability



is shown in Figure 2. Of course, the door cannot be closed to a reversal of this procedure. Occasionally a great scientific break-through or a commercial development of military significance is made, without reference to any known military concept. The military aspects of such research and development are then used as a basis for evolving new strategic and tactical concepts of warfare.

The evolution of concepts for future operations and the identification of general military material requirements are interrelated problems. A concept for a future "type" operation implies the need for a

capability of conducting military operations in a particular manner. Conversely, by making this determination, a general material need has been identified. Further analysis will indicate that this broad need can be broken down into a series of component needs. These needs either involve the improvement of existing weapons and equipment or the development of new ones. This analysis demands that our own systems requirements be reviewed. Also, our systems relationship with those of the probable enemy must be determined. Amphibious operations are concerned with surface, sub-surface, air and land aspects of warfare. It is essential that the weapons systems of each aspect involved be compatible with one another in order that the operation may be a truly integrated one.

The identification and isolation of specific requirements is a basic con-

sideration in development planning. Arts and sciences are required in the identification of military requirements as well as in the fulfillment of such requirements. Accordingly, current operations or parts of operations must be analyzed to determine if they are amenable to scientific attack and solution. If so, a scientific solution is sought and a qualitative basis for decision is developed. In this research, emphasis is placed upon the examination of the tactics, strategy and composition of opposing forces to see if any changes in our own operations, weapons systems and equipment are required. This analysis bears some resemblance to the commander's estimate of the situation. Figure 3 illustrates this basic analysis. Unfortunately, at this time, military science is not an exact science. This is especially true in the field of warfare operations. It is true that within the last few years the military analyst has made significant advances in the science of operations research. In certain specific areas, the military analyst is now able to furnish the military plan-

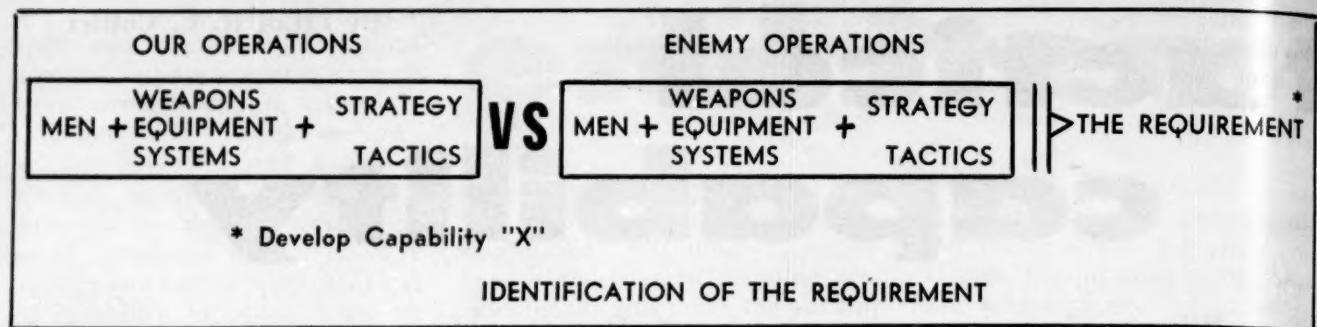


Figure 3

ners reasonably accurate data upon which to base decisions. The data provided by the military analyst are only a part of the material upon which a final command decision is based. However, it is essential that decisions relating to the evolution of concept and the identification of military requirements be based on an "operational analysis" and not upon unsubstantiated personal opinion.

When a requirement has been identified and the need for a specific capability established, estimated weapon or equipment performance must be determined. The characteristics and capabilities called for by the requirement are the common denominators that generate technical effort. They must be realistic. The determination of realistic requirements demands that the planner consult with the personnel officer, the intelligence officer, the logistician, the scientist, the engineer and the ultimate user. A material development requirement may exist despite the presence or absence of a technical capability of meeting it within the specified time period. It is not basically realistic unless it is valid from the command, research and engineering viewpoints. Figure 4 illustrates the nature of the considerations involved in the translation of a required capability into a proposed weapon development.

Material development is concerned with the improvement of existing weapons systems and equipment as well as the development of new ones. The need for material improvements is frequently indicated by the Fleet Marine Force, the various schools, the several development activities and individuals. The requirements for weapon and equipment improvements are considered along with the requirements for new developments in the determination

of overall requirements.

When it is determined that a requirement is realistic, command must determine its relative importance. If the armed forces had unlimited money, men, time and facilities available, they would be able to pursue material development without much thought as to the relative importance of the various military needs. However, the armed forces always have limited resources available for development work. It is essential that the greatest deficiencies in military capabilities be identified so that the resources of science and technology can be especially concentrated upon them. Development effort should not be diluted by unnecessary duplication in the development of weapons or equipment that will do the same job. Care should also be exercised in planning for the development of weapons or equipment that will provide only marginal gain in tactical capability.

Command must consider all of its needs for material development in order that they may be arranged in a scale of relative importance. If this is not done, the most critical deficiencies may not be solved when a solution is needed. In fact, command may be less concerned with that which is technically *possible* to build than that which is required to make intrinsic service characteristics effective at an affordable cost.

The relative importance of proposed developments and development timing are interrelated considerations. First things must come first; yet the estimated completion dates for specific developments must be generally based upon several factors. These factors include the relative importance of the development, its relationship with other weapons systems and equipment, and the availability of funds.

Although science is making an im-

portant contribution in the study of warfare operations, war has become so complex that most scientists and engineers must still confine their major effort to the devising of new weapons. When the military planners have identified the need for a particular capability for future operations, emphasis in material development is shifted from the planners to technical management. The scientist and engineer must now make their national defense contribution.

After considering the material development needs expressed by military planners, the technicians devise various approaches which they feel will solve or contribute to the solution of the stated military needs. These various proposals are analyzed to determine if they give real promise of producing an effective end-item within the prescribed time. In this analysis the technical man must always consider 4 basic factors: selectivity, timing, simplicity and reliability.

Since a weapon is only as good as its human operator, the utilization of human resources must be considered in weapon and equipment design. The engineer must consider the ultimate user. Consequently, his design should provide for the optimum operator-machine combination through a simplification of the operator's role and the reduction of maintenance requirements. His design must provide for equipment reliability, minimum cost and minimum content of critical materials; it must provide for equipment that will be susceptible to mass production. Yet, he must develop equipment which will be technically and functionally superior to its previous counterpart.

Following the decision on the technical approach to be made, technical management prepares a development program in accordance with

the relative importance of the various development areas and the funds available. Frequently, funds will not be available to accomplish all the work desired. In this event, command must determine which work should be accomplished. Command determines the "what" and "when" of material development; technical management determines the "how."

Battle is the acid test of a material development product. However, prior to battle test, a determination of the acceptability of a weapon or equipment for service use must be made. When the engineer has completed development of a weapon or equipment item, it is turned over to command for operational evaluation. In turn, command usually designates a specific agency to test and evaluate the item for service acceptability.

If the item is found unsatisfactory for service use, it is returned to the engineer for further developmental work. In some instances performance is so poor, that it is considered undesirable to continue work upon an item. In this case, development of the item is usually terminated. If the item is found to be suitable for service use, an allowance is established and procurement is started.

It has been observed previously that material development must be made at an affordable cost. The development of a material end-item that is either too expensive or too complicated to be put into production is wasteful and militarily un-

realistic. Consequently, ultimate procurement must be considered throughout the development process. Also, logistics planners must make tentative plans for procurement well in advance of service evaluation of an end-item. These plans cannot be firm, but they will provide a realistic basis for actual procurement. This will aid in cutting down "lead time."

As the tempo of military development increases, it is necessary that plans for the best employment of each weapon or equipment be evolved prior to the distribution of the item to using units. Today, time will not permit learning by lengthy trial and error on the battle field. New weapons and equipments are distributed to the operating forces with but little time in which to develop tactics, techniques and organization for their employment. Therefore, the development of tactics, techniques and organization must parallel the development of the weapon or equipment wherever possible. This development must be based on quantitative appraisal of the factors involved and a preliminary test of new tactics, techniques and organization by special units.

The development of weapons and equipment must also be paralleled by a determination of the skills and knowledge that will be required to operate and maintain them. Following this determination, there must be devised training methods and techniques together with training aids, which will be required to de-

velop individual and group skills needed to operate the new weapon or equipment. Concurrent with this development, methods for selection and assignment of personnel to be trained to operate the new weapons and equipment must be considered.

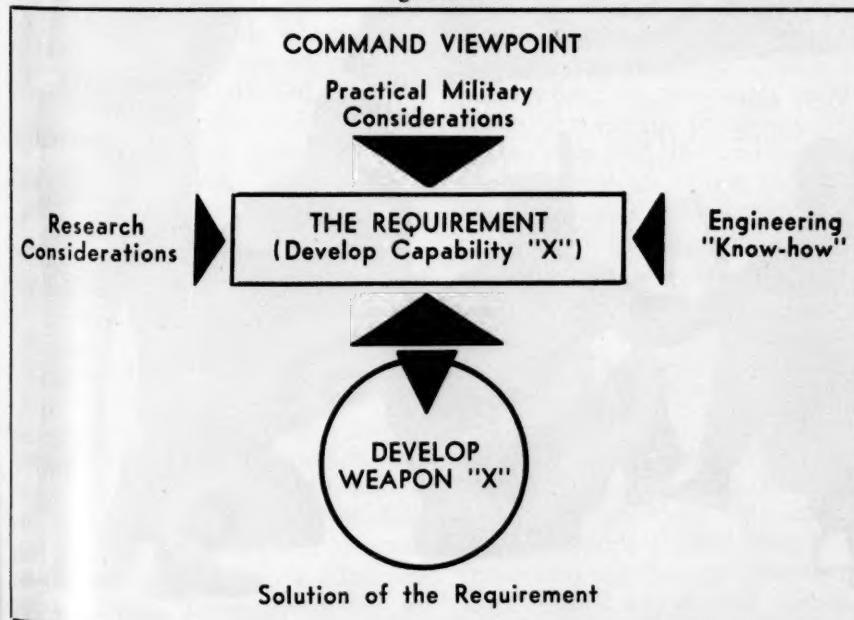
The tentative concepts for weapon or equipment employment are but "best" guesses or forecasts of their tactical use. As weapons and equipments are put into service use, significant information concerning their performance is accumulated and analyzed. Such analysis will generally indicate the merits and deficiencies of the item, the tactics to be employed, appropriate tactical organization, training methods to be used, and desirable technical improvement of the item.

The Roman military forces had a continuous military tradition for over 1,800 years. The Imperial Roman Army was a professional force for about 1,100 years. During this period, probably the most outstanding military developments were the stirrup for the cavalry saddle and the catapult. American armed forces have been in existence for less than two centuries. However, during this short period of time we have moved from the muzzle-loading cannon to aerial delivery of nuclear weapons. Despite recent rapid advancements in the various arts and sciences which have accelerated military development, the military man must still provide leadership in the development of new military systems, weapons and equipment.

The Commandant of the Marine Corps has repeatedly encouraged all personnel to submit ideas pertaining to the development or improvement of tactics, techniques or equipment to be employed by the Marine Corps. The feasibility of such suggestions will be determined, and where applicable, they will be integrated into the Marine Corps development program. Suggestions or recommendations made by individuals should be addressed to the Commandant or the Development Center through channels.

The military planner, the scientist and the engineer are the architects of military development. But the development of the essential end-item — tactical capability — is the job of every Marine. USMC

Figure 4



MILITARY TRAINING, LIKE MUSIC, exists in time, not in space. For music is that which happens to a listener when the notes are played in orderly sequence. Instruction is what happens to a student when the material is presented so that he can understand it.

In like manner, a master lesson plan is merely a string of words on a piece of paper unless it is properly presented, retained and used by the student. Only then does instruction exist.

Everyone of us, officer or NCO, spends at least half of his career as a unit commander. As a commander we not only are leaders, but are at the same time instructors. How many

times have we analyzed ourselves and found that we are leaders but, for one reason or other, we just haven't come up to measure in our troop training duties? We, as squad leaders, platoon leaders, first sergeants or division commanders must not only lead our men but also instruct them in their duties according to accepted Marine Corps doctrine.

There is no denying that war and the training for war, is rapidly becoming extremely complex. The administrative tangle of paperwork too often precludes the proper preparation and supervision of unit training. As a consequence, training is gradually becoming more and more difficult to accomplish. Something

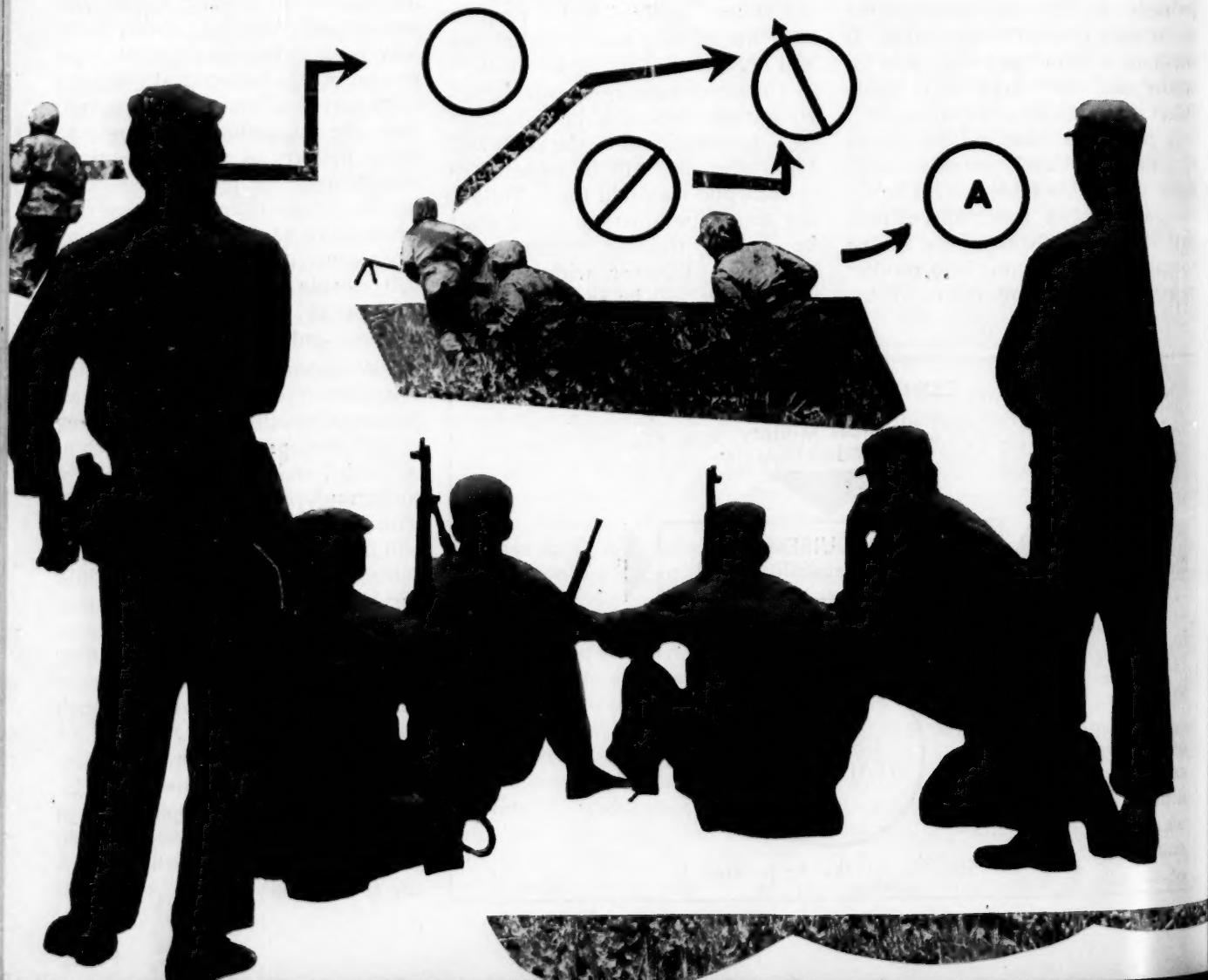
must be done to speed up the training and to make more efficient use of training time.

You have heard the well-worn proverb, the longest way 'round is the shortest way home. Figuratively speaking this may be so, but all too often training shortcuts do not produce the results we expect. Training is one of the functions in which there is no easy way out. We get out of training only as much as we put into it. A realistic and productive training program is attained only through many hours of hard work and painstaking planning.

We have all carefully studied the General Order on individual training for enlisted men and wondered

By Maj C. R. LaPlant

PREPARE FOR



how we could get it all done with the effectiveness required. To add to our problem, the regiments and groups, as well as the battalions and squadrons publish detailed training programs based on the General Order. These orders require strict compliance because of restrictive training areas, limited training aids and other exigencies of the service. There is generally no argument that the regimental, group, battalion or squadron training programs are good plans. In fact, we might very well come up with a similar plan if we were the S3. But we as unit commanders have to accomplish the myriad objectives on the training program. How is the best way to do it?

We should first take a good long

should tentatively select our instructors and fit each one into the training position for which he is best suited. Even though two men are blessed with apparently the same amount of training and education they are different, for they do not have the same likes and dislikes. We find that one prefers to instruct on the drill field while the other is more at home on the flight line or running an FDC. Each has his own

specialty which must be determined if we are to exploit it.

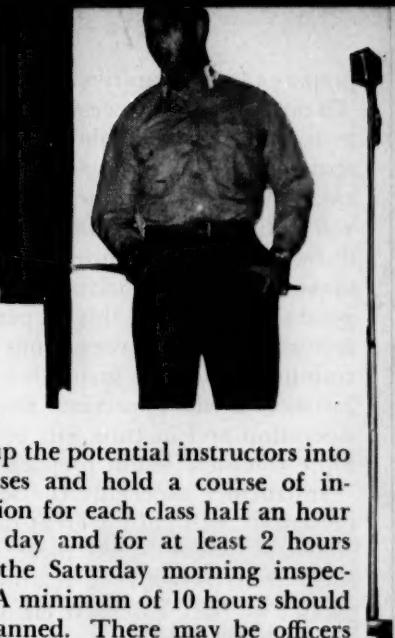
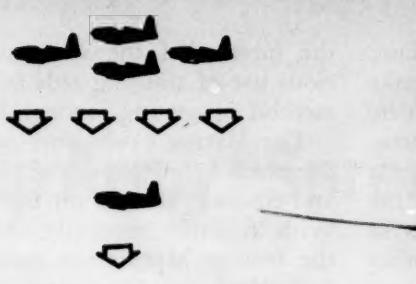
With all the personnel pegged as to their leadership and training capabilities, we can then draw up a chart showing the personnel slated to instruct each subject. In doing this we should take individual desires into consideration, for doing something he likes will produce a more enthusiastic leader—which is one of the ends toward which we are working. The raw material is there but someone must take this mass of energy and put it to useful work. That's where we, the *leaders* and *teachers*, come in. This is the point where we must start making noises like college professors. Most of us have had the rudiments of teaching methods. If not, there have been thousands of books written on the methods of instruction. It is our job to study and assimilate these techniques of instruction and present them to our officer and enlisted instructors so that they, too, will know how to teach in an acceptable manner.

Preparing the instructors for their training jobs isn't easy. There will be many times when we think it is just impossible to find time to get these men together for this instruction. A good way to find time is to

split up the potential instructors into 2 classes and hold a course of instruction for each class half an hour every day and for at least 2 hours after the Saturday morning inspection. A minimum of 10 hours should be planned. There may be officers and men in your unit who have had teachers' college training. Put them to work. They may be able to teach the class as well or better than you, the unit commander. Certainly they are not burdened with the responsibilities of command and can be spared for the time necessary to run this short program of instruction.

Once we have trained the qualified instructors we have to worry about keeping or replacing them, as required. This always brings up problems we would much rather forget. We have all been subjected to the transfer of key men and to the unexpected crisis created by an unfortunate accident. To minimize the effects of such incidents, we should assign at least 2 instructors to the same subject. This method will not only make it easier to keep the schedule running in logical order, but it will allow for annual leave and any other emergency that might arise. Of course, this requires that each instructor prepare his own lesson plan, complete with training aids, training areas, assistants, field manuals etc. Don't leave the preparation of lessons to chance. Require that the completed plan be filed where everyone will know where to find it. Be careful, though, that the less energetic instructors do not try to slip a fast one over on you. Every lesson plan must be carefully checked for errors and omissions, for a training period is of little value if the plan does not attain the objectives for which it was outlined.

We should not allow the time-worn excuse that our junior officers and NCOs do not have the time to



INSTRUCTION

look at these master plans to determine if the program can be executed as it stands or whether there are changes which should be incorporated into it. Revisions to even the best plans are usually required as the situation changes. The S3 will put our ideas into the plan as a revision if the changes are worthwhile. The higher-echelon plans are revised, if required, but then we are through making changes since there is little we can do to change the General Order. We are all ready for the long grind—the actual execution of the plan. Thousands of obstacles immediately come to mind—training areas, AWOL, unqualified riflemen, individual training records cards, IG and hundreds of problems too numerous to mention. The situation seems nearly impossible but there is a way out.

Right now is the time to lick this problem so that when the next training program comes out we will be ready for it, come hell, high water, or an extended rainy day schedule.

Next we should carefully inspect our personnel resources, officer and enlisted. Every man in the unit is a potential instructor. Most of them we will find are young and inexperienced or have had only a minimum of education. From the group we

prepare these exhaustive lesson plans. To do the job right we should make at least 2 days available for each instructor to plan a course of instruction. This means that for a time you will have to double up on the duties on the remaining officers to make this time available. Another good time to use for this preparation is during holiday leave periods when training is usually suspended. The instructors will appreciate this consideration and in turn will produce more complete lesson preparation.

Instructors, especially the less experienced, will gain a great deal of confidence by working together on related subjects. This relationship should be fostered for it creates an audience for the neophyte instructor. Every lesson should be practiced before final presentation and what better way is there than to have their friends constructively criticize their instruction? These preliminary presentations also serve to check lesson timing, platform manner, effectiveness of training aids and will determine whether the lesson is actually instruction or just wasted effort.

Once we attain the high level of instruction we must closely supervise the training and make whatever changes are required to maintain a progressive and productive training program.

We have all attended classes that lacked student participation. This is the type of class where the students sleep with their eyes open and plan their next liberty. It is obvious that something must be done to stir

the interest of the students. Judicious use of training aids is a good method of getting student interest.

The Marine Corps does not have the funds to buy expensive mock-ups and cut-away models for every unit. With a little ingenuity, however, the average Marine can make effective substitutes. How often have we brought FM 21-8, (*Military Training Aids*) to the attention of our junior officers? There are hundreds of ideas for homemade training aids in that manual. FM 21-5, (*Military Training*) also has some helpful suggestions on this subject. As an example, to illustrate the movement of a rifle team, sandpaper cutouts can be moved around on a hanging GI blanket. The sandpaper templates stick nicely to the blanket and never fail to arouse the interest of the men. The trainees might be wondering why the paper sticks to the blanket rather than centering their attention on the tactics of rifle team movements but, at least, they are awake. This type of training aid can be made easily and is as effective as the most expensive cut-away models.

Prepared lesson plans really pay off big dividends during extended rainy day schedules. Too often 2 or 3 days of rain are wasted training days. However, with a well organized training program, complete with prepared lesson plans, an extended inclement weather period can be made very productive. The inclement weather schedule can be used to catch up on subjects which can be presented more comfortably in the classroom. For example, sanitation, personal hygiene, map reading, weapons instruction and other subjects on the Individual Training Record Card can be easily inserted into the schedule if the instruction is prepared in advance.

The Individual Training Record Card is under revision at the present time but a similar substitute will be used in the future. A well-prepared lesson includes an examination of the material covered. What better way is there to determine the ITR markings than by grading the man's classroom performance? Too often the markings on the ITR are haphazard and estimates at best. This is not a fair method of marking, so to make up for this we usually mark a little higher than we should. Of course the best remedy for this situation is to keep accurate and complete records on each subject for each man. At the end of the training period, or at the time of his transfer, it is only a matter of computing scores to mark each man correctly and justly. The trainee is thus assured that he earned his markings since his superior officers know the exact measure of his ability.

This method of recording serves still another purpose, that of serving as a gauge for the quality of instruction. Too many failures is a ready-made indicator that something is missing in the instruction. We can take immediate action to correct this fault if we keep accurate and up-to-date records.

The only positive way to assure ourselves that our unit is combat ready is to train every man to the best of our ability. And a unit cannot be ready for action if its men are only partially trained. We should consider every training period as if it were to be our last before battle. Let us be well prepared by having well prepared instruction. USMC



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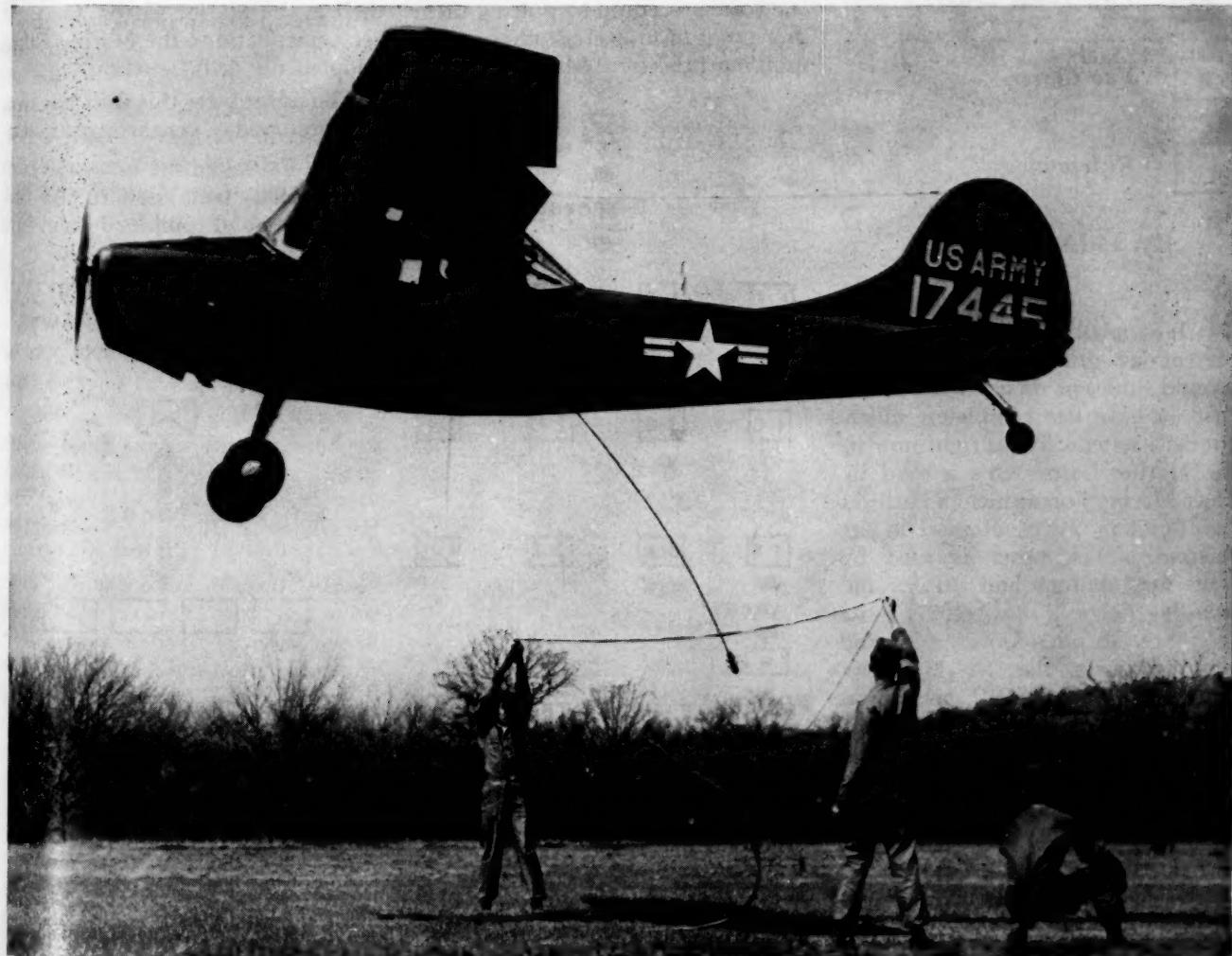
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THE NEW DRILL



Platoon Leader



Platoon Sergeant



Platoon Guide



Squad Leader



Fire Team Leader



File Closer



Rifleman

By 1stLt J. Phillips

IF YOU'RE FAMILIAR WITH OUR present-day drill field and parade ground situation, then you are aware that we have *two* completely different drill systems in use right now in the Marine Corps. One is used by Fleet Marine Force units and utilizes the *Landing Party Manual* as its reference. The other is used by posts and stations and utilizes the *Landing Force Manual* (1927) as its reference. In other words, a Marine stationed with the 1st Mar Div learns one type of drill, gets transferred to Quantico, and has to learn a completely new drill, causing undue confusion, if nothing else.

This highly undesirable situation has finally been corrected.

The Marine Corps has found the answer to our disturbing condition and has just adopted a new system of drill, to go into effect as soon as reproduction of drill texts is completed. The drill was conceived by

... offers **ONE** system that every Marine can use, whether he's with the FMF or at posts and stations

the Commanding Officer, Training and Test Regiment, MCS, Quantico in early 1955 and was initially developed and tested at that unit. It accomplishes two important objectives. First, it takes junior noncommissioned officers out of the obscurity of the ranks and gives them an opportunity to develop command and voice procedure by putting them in a position to exercise their quick thinking processes. Second, it offers

zations be assigned to further test the drill. The Recruit Depot at Parris Island reworked parts of the drill and other units made certain recommendations to improve the drill. The end result being that all Fleet Marine Force units and Recruit Depots which tested the drill, recommended that it be used as the drill in the Marine Corps. On these recommendations, the Marine Corps adopted the drill.

The advantages this drill has over our present-day systems are these:

- 1) It has taken the best aspects of both drill systems used in the Marine Corps, and combined them into one.
- 2) It offers *one* reference for drill.
- 3) It offers *one* basic formation.
- 4) It gives the squad an opportu-

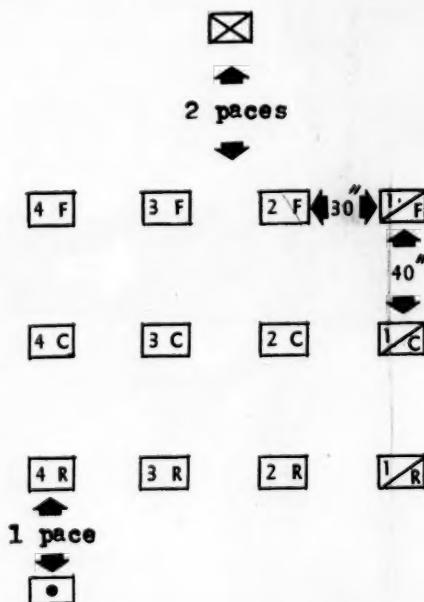


Fig 1—Squad at normal interval

one drill system that every Marine, whether stationed with the Fleet Marine Force or doing duty at posts and stations, can use.

With the above considerations in mind, the drill was developed and finally presented to the Commandant in May of 1955. The Commandant directed that field units of the Marine Corps and other organi-

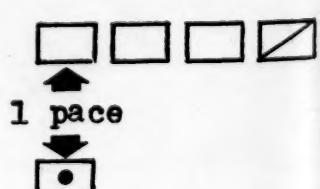
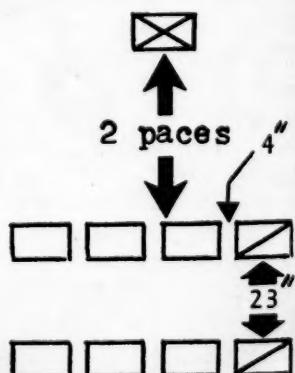


Fig 2—Squad at close interval

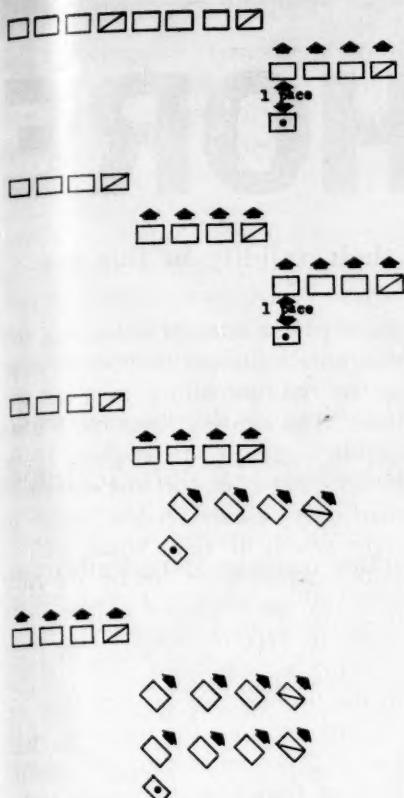


Fig 3—Right front into line

nity to execute all the movements that a platoon can do either under the *Landing Party Manual* or the *Landing Force Manual* 1927, or old drill.

SQUAD DRILL

Squad Drill is conducted generally as follows:

The squad falls in at:

Normal interval and distance—which is 30 inches interval and 40 inches distance. (See Figure 1). In this formation only *Landing Party Manual*-type of drill is conducted e.g., "By the Right Flank, MARCH" and, "To the Rear, MARCH." However, this interval and distance should only be used by units which have no set organization because it does not give the junior noncommissioned officer an opportunity to exercise command and voice procedure.

Close interval and distance—which is 4 inches interval and 23 inches distance (see Figure 2). In this formation only *Landing Force Manual* (1927) drill is conducted e.g., "Squads Right, MARCH" and "Squads Right About, MARCH." This is the primary interval and dis-

tance to be used for precision drill by all units. However, to expedite the movement of troops from one place to another, normal interval and distance can be used. The only change in this formation and the formation used in Figure 1 is the interval and distance.

Using the above formation, the squad executes all the movements of *Landing Force Manual* (1927) or old drill, that the platoon does (see Figure 3). The fire team leaders are placed in a position of command and responsibility, in that they give supplementary commands to their fire teams which act independently after the squad leader's initial command. For example; the second fire

team leader in Figure 3 gives the supplementary commands, "Right Oblique, MARCH," "Forward MARCH," "Team HALT."

PLATOON DRILL

The platoon falls in at:

1. Normal interval and distance. Same general rules apply to the platoon as applied to the squad, both at normal and close interval. (See Figure 4.)

2. Close interval and distance. (See Figure 5.)

Company and higher echelon formations are based on the squad and platoon organization. They are essentially the same as those formations which we now use. US MC

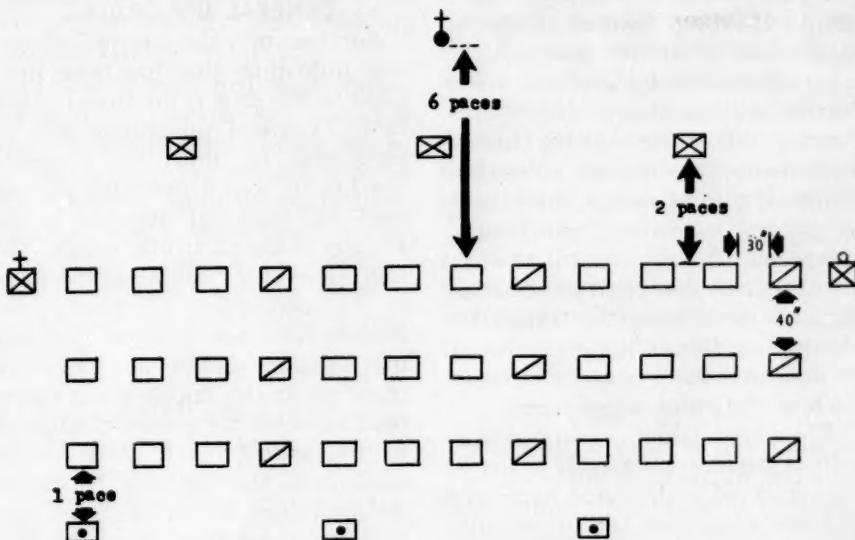


Fig 4—Platoon on line at normal interval and distance

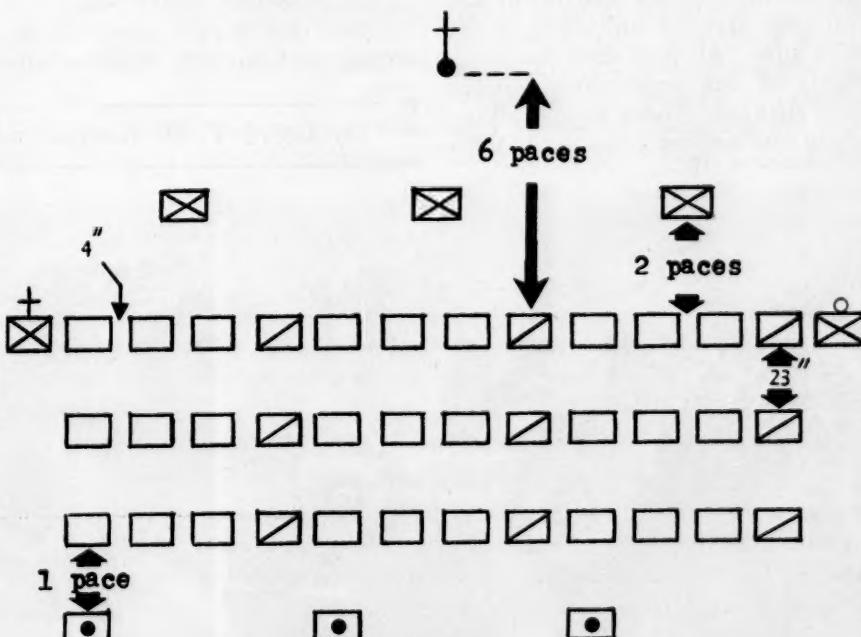


Fig 5—Platoon on line at close interval and distance

Let's rethink our movement from . . .

SHIP TO SHORE

An examination of our unloading operations to determine their validity in this era

ONE OF THE WINNING ESSAYS OF the last GAZETTE contest described the "amphibious operation of tomorrow." This amphibious operation of the future involved essentially an airborne ship-to-shore movement. In this year of 1956 we are in a transitional stage of development. We are still concerned with the water-borne ship-to-shore movement. However, because of the introduction of atomic weapons, we must re-examine some of our water-borne ship-to-shore procedures. Among the things calling for re-examination are the use of tactical-logistical control groups, the concept of general unloading, our landing categories, the employment of serial numbers and shore party operations. Perhaps there are other things, but this writer thinks some procedural or doctrinal changes are involved in each of the enumerated items.

Procedures laid down in our manuals at present are largely based on an attack of a defended area with the attacking force landing on adjacent beaches. Supporting such an attack is the basic assumption that all assault shipping will be in the transport area for unloading at the same time. All 3 of these basic elements in our amphibious concept have changed. Today we are talking about our landing areas and beaches

being neutralized by special weapons; about landing on dispersed beaches, and the phasing of assault shipping into the objective area. These changes are provoked and permitted by the introduction of atomic weapons and compel us to engage in a continuing evaluation of our procedures.

GENERAL UNLOADING

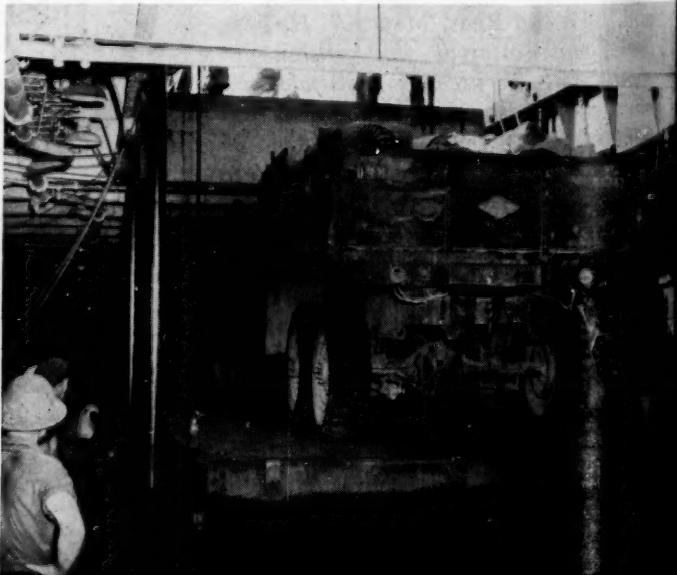
For instance, the concept of general unloading that has been practiced in the past is no longer applicable. General unloading may be conducted by ships on dispersed beaches in accordance with the tactical and logistical situation in the vicinity of the particular beach. The conditions that must be present prior to commencement of general unloading have not changed; however, the decision should no longer be made for assault shipping as a whole, but rather for the groups of ships off each separated beach. The tactical conditions, the logistical situation, sea conditions etc. on one beach may be entirely different from what they are on another beach.

ASSAULT SHIPPING

Conditions of atomic warfare still require that shipping be phased into

the objective area for unloading, and that only a limited number of ships be in the unloading area at one time. The landing force has 2 basic requirements in this respect: 1) unloading must support the scheme of maneuver ashore (right units in right places at right time) and, 2) bulk supplies must not be unloaded prior to the readiness of the shore party to receive same. The ships carrying assault units and arriving in the transport or landing ship unloading areas on the morning of D-Day will not be able to unload supplies at that time inasmuch as the shore party will not be functional ashore. Such ships will, of necessity, have to make a second trip into the unloading area. Our embarkation procedures must take this factor into account. Troops, equipment and supplies that must be debarked initially must be so designated in plans. All such assault units and cargo will fall into one of the first 3 landing categories — that is, scheduled, on call, or non-scheduled. The term "assault" could well be used to embrace these 3 categories. Another descriptive term needs to be designed to cover troops, equipment and supplies that may be unloaded on a ship's second trip to the transport unloading area.

By LtCol T. M. Burton



LANDING CATEGORIES

This brings up reconsideration of these landing categories. Assuming our landing beaches/areas are neutralized by atomic weapons (or that we are landing in an undefended area using surprise), we will not have to wait and watch the development of the tactical situation to determine how we want things landed. We will want to get the maximum number of troop units and supporting equipment and supplies ashore as quickly as possible, and the speed with which we do this will not be determined by the time required to silence enemy guns and breach his fortifications as heretofore. Weather, sea conditions and our own ability to make the shore party functional ashore will be the factors determining how quickly we get the landing force ashore. It seems that we should amalgamate the 3 previously listed landing categories into the proposed "assault" category. The present assault schedule and landing sequence table should be amalgamated into one document perhaps titled "assault schedule." This document would cover all assault type troop units, equipment and supplies, and there should be a separate assault schedule for each dispersed beach or landing area. All units and supplies of the landing force not in the assault category would fall into a "support" category and general unloading procedures could be applied thereto.

To facilitate identification and communications, we propose that it would be appropriate to use serial numbers for all troops, equipment and supplies in the assault category. The only thing new here is the serialization of supplies which may

be necessary to include in the assault category. It seems probable that normally such quantities may be preloaded on vehicular and amphibian equipment, and no serialization problem regarding supplies will exist.

CONTROL

At this point it would be appropriate to discuss control procedures to fit the current ship-to-shore movement involving dispersed beaches. It appears to this writer that there will be no need for the Attack Force to use an APD or similar type ship to serve as a central control ship. Necessary control functions can be performed from the Attack Force Commander's flagship. For the Landing Force this means there will be no requirement for a Division Tac Log Group.

The use of separated beaches does not appear to modify the use of a primary control ship off each beach, nor the functioning of landing force representatives on such control ships. In other words, there continues to be a requirement for RLT and/or BLT Tactical Logistical Control Groups tailored to fit each different situation.

A new requirement accruing to the Division Staff is that of monitoring the phasing of assault shipping into the unloading areas—assuming the Attack Force Commander exercises this function. If the Attack Force Commander gives this task to a subordinate, the Division must establish representation on that subordinate's ship. This task logically falls to the Embarkation Section of the Staff.

There is need for a new document as part of the landing plan annex to

the operation order; that is, a document listing the estimated chronological sequence of ships the landing force desires off each beach. Such a compendium of ships and their estimated unloading time should be prepared for each anchorage area or for each landing beach and/or area. It is a responsibility of the landing force to tell the attack force the required sequence of ships based on embarkation plans.

ASHORE

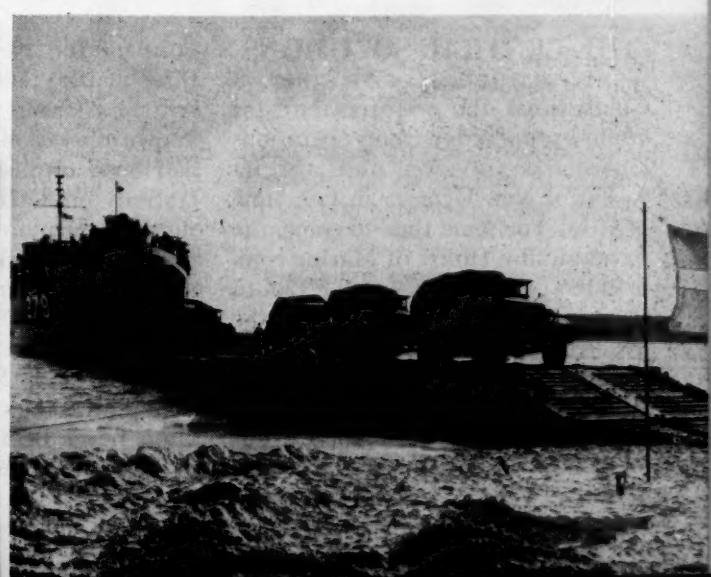
Turning our attention to shore party operations, we note two changes: 1) they can commence operating as fast as equipment can be made functional ashore—the tactical units are scheduled to move inland rapidly and, 2) beaches will be dispersed thereby precluding the consolidation of all division beaches as was done in World War II.

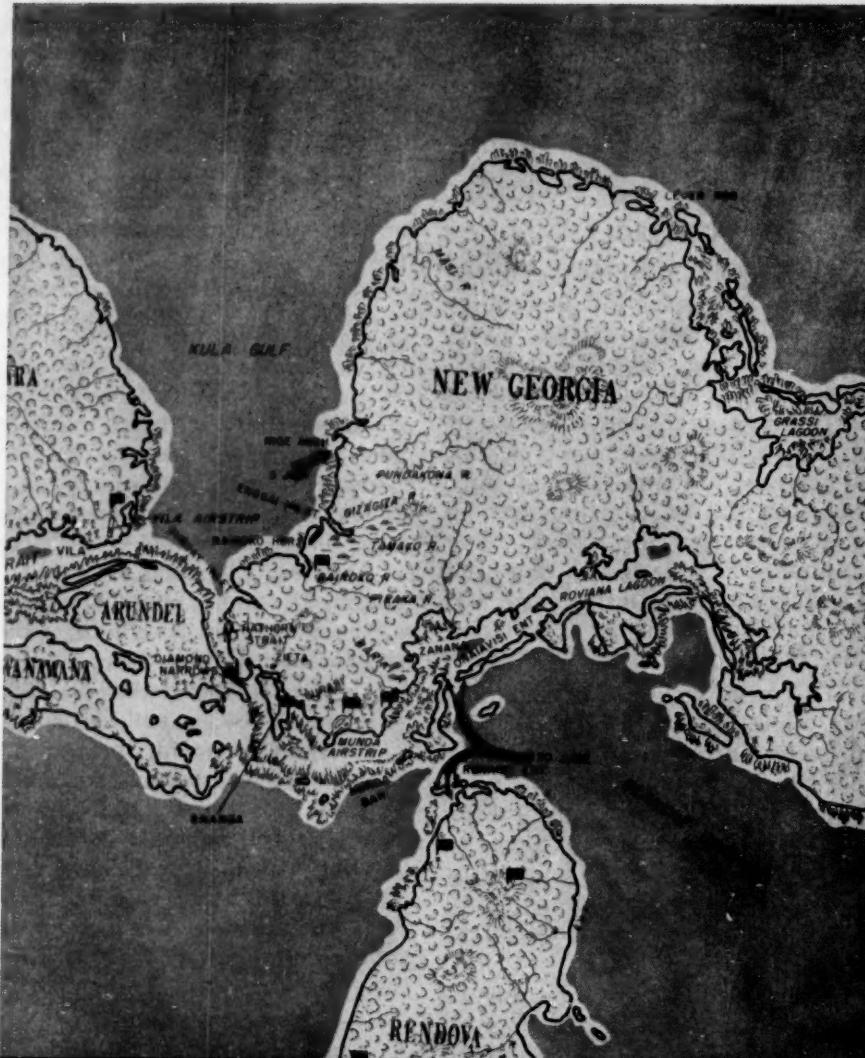
Dispersed beaches will involve essentially independent shore party operations, and it seems likely that it will be desirable to initially attach Shore Party Groups to Regimental Landing Teams. Due to fast movement inland by assault troops, Shore Party organizations may have to devote more attention to the local security problem.

CONCLUSION

The modifications to our amphibious operation discussed in this article are those that should be explored in our maneuver exercises today. They are not dependent on new equipment, revised tables of organization, or other major alterations to the landing force. As has been stated we are in a transitional stage of development, and must be continually alert for needed changes in our procedures.

US MC





NGF

By Col F. P. Henderson

THE CENTRAL SOLOMONS

With the end of fighting on Guadalcanal the requirement for gunfire support for troop operations ashore was also over until the invasion of New Georgia in late June of 1943. For some time to come, the naval gunfire efforts of Marine commanders and staffs in the South Pacific would be directed toward the problems of training and of planning for proposed future operations.

Down in the Wellington area of New Zealand the 2d Mar Div was busy enjoying the wonderful hospi-

tality of the New Zealanders, battling malaria and getting ready to resume training for their next unknown operation. The officers who had been connected with NGF operations on Guadalcanal now considered themselves to be real experts in that field and had lots of ideas for a training program that would enable the division to use NGF to the utmost in its next combat. Their optimistic plans for a high-powered gunfire training program never became reality because of one insurmountable obstacle—a

lack of combat ships to train with.

COMSOPAC was so hard up for destroyers and cruisers for combat surface operations and convoy escorts in the South Pacific that they had none available to send to New Zealand for training with the 2d Mar Div. As a result, their training in the planning and conduct of naval gunfire support was far from what an amphibious division should have in preparation for a bitterly contested assault landing. Tarawa might have been a somewhat different story if the 2d Mar Div, the fire support



ships and the Navy amphibious staff had been able to carry out a good gunfire training program together.

Up north in the Auckland area, the 3d Mar Div was hard at work training. They were right anxious to get into the shooting war and share some of the fame and glory the 1st and 2d Mar Divs had. Their efforts to put on any good gunfire training were plagued by the same obstacles that had stymied the 2d Division's plans. They did benefit, however, from the 2d Division's experiences on Guadalcanal. At the

invitation of the 3d MarDiv's CG, the 2d MarDiv sent groups of officers from the Division staff and all of its units up to Auckland to pass on the lessons they had learned in combat. Through this means the 3d Mar Div learned what they might expect in the way of gunfire support operations if they became committed to combat under a situation in any way similar to that of Guadalcanal.

In New Caledonia, the I Marine Amphibious Corps Hq (I MAC) at Noumea found that it didn't have anyone on the staff to handle an

increasing number of artillery, NGF and AAA problems. So, in May of 1943, they formed a new special staff section—the Artillery Section. This section consisted of an artillery colonel as chief of section, a lieutenant colonel for field artillery, a major for naval gunfire and another major for AAA. The section set up shop in part of a rather decrepit out-building in the headquarters compound and went to work.

One of the first projects the new section undertook was that of establishing a NGF training center and program for all naval and ground forces in the South Pacific. The South Pacific navy was growing slowly but steadily as new ships continued to report in. There were 2 Marine and 4 Army divisions available in the area for COMSOPAC to use, and various plans were afoot for further amphibious assaults in the Central and Northern Solomons. The I MAC felt that if these assaults were to receive a better quality and bigger quantity of gunfire support than we had at Guadalcanal, a theater training program was needed to standardize gunfire support planning and techniques, and to insure a proper degree of competence in all echelons of both the sea and land forces.

A proposal was made for a set-up, on a modest scale, similar to that which was coming into being at Pearl Harbor and Kahoolawee. The I MAC wanted to get a small island somewhere in the South Pacific, or a chunk out of one of the larger islands, set aside for a shore bombardment range. It also wanted to establish a permanently staffed shore bombardment training unit, either at Noumea or at the bombardment range. With this set-up it was hoped that they could train both troop and Navy staff gunfire planners, train troop shore fire control parties (a particularly urgent need for these existed in the Army divisions) and finally train all the SOPAC combatant ships in the techniques of accurate shore bombardment in support of troops.

Everyone concerned with preparing this recommendation was sure that the need for some such a training set-up in the South Pacific was so obvious that the plan would be quickly approved. The proposal never got much past first base, if it

even got that far. Somewhere in the upper echelons of the many headquarters in Noumea it was vetoed and set aside. After that setback the Artillery Section tried to get several lesser expedients approved for training ships and troops in gunfire support, but none of these met with much luck, either, during the spring and summer of 1943.

During all of this time the Army and Navy were busy planning the New Georgia landings. As I MAC had no connection with the operation, other than furnishing the 1st Marine Raider Regiment and the 9th Defense Bn to the landing force, it was not involved in the hectic planning situation which existed on that particular operation. (In *Breaking The Bismarcks Barrier*, Vol VI of History of United States Naval Operations in WW II, Prof. Morison says: "The strategy and tactics of the New Georgia campaign were among the least successful of any Allied campaigns in the Pacific.") All staff members, however, did consider themselves highly competent to look at what was happening and then say how the operation should go, or to give expert advice if anyone cared to ask for it. The new Artillery Section was no exception in this.

There seemingly was never any comprehensive and detailed plan or preparations to effectively and continuously utilize naval gunfire in support of troop operations. The only fire support ships provided for the main landing on D-day were one destroyer division of 4 ships from the destroyer screen which had additional duty as "also Fire Support Unit." During the landings at Rendova and Wickham Anchorage, DDs effectively silenced Japanese shore batteries that opened up on the transports unloading troops. When the Marine Raider Regiment made its later landing at Rice Anchorage, the Navy sent 3 light cruisers and 4 destroyers in to shoot up the enemy stronghold at Bairoko during the landing. Some of these destroyers also later fired on shore batteries that opened up on the landing itself. Several times during the Army's advance from Zanana Beach to Munda, the Navy would send up a bombardment force of cruisers and destroyers, or destroyers only, and shoot a lot of ammunition



Principal area of operation

into the general Munda area. None of these accomplished any immediate good as far as the troops ashore were concerned.

The reason that the Army units fighting in New Georgia did not get good gunfire support was a lack of appreciation of the capabilities and know-how for using naval gunfire as an integral part of the fire support of infantry in combat. I have never yet heard of a case where anyone from the deep-water side of the amphibious team forced NGF down the throats of the troops ashore. If the man on the beach wants gunfire support, he has to know exactly what he wants, when, where and how he wants it—and then make his requirements and plans for use of gunfire known to the man afloat. This is where the units at New Georgia suffered. They had no training or organization within their combat units to plan for the use of gunfire, or to control it if they did get what they wanted. They didn't know what the Navy could do for them, or how to get the ships afloat into the fight ashore.

The big bombardment on the night of 11/12 July is a prime example of the results to be expected when troops are illiterate in the realm of naval gunfire support. At that time the 43d InfDiv was bogged down in its attempt to open up a new supply beachhead at Laiana. The Navy sent up a cruiser-destroyer bombardment group consisting of 4 light cruisers and 10 destroyers (the largest such bombardment group that was ever assembled throughout the entire Solomons' campaign) to help get the attack going again. The best account of this operation can be found in *Breaking the Bismarcks Barrier*. Professor Morison says:

"Army officers, distrusting the accuracy of ships' guns laid at night by radar ranges and bearings asked (RAdm) Merrill to leave a mile-wide lane between his estimated fall of shot and their own front lines. Further, they asked that his ships shoot parallel to the front lines rather than perpendicular to them so that 'overs' would not hit friends. . . . After 40 minutes' bombardment, throwing 3,204 rounds of 6-inch and 5,470 rounds of 5-inch shell at Munda, Merrill retired through the open sea south of Rendova. And what good did it do? Merrill himself remarked that the no-man's land before our lines probably provided a neat refuge for (Gen) Sasakis' people during the shelling; that 'considering the accuracy of our modern fire control equipment this margin of safety seems unnecessarily large.' He was right. (MajGen) Hester's soldiers distrusted artillery, even their own, so a number of Japanese who might have been shelled, survived to kill a good many Americans who should have stayed alive. The Marines, on the other hand, loved naval gunfire support and did not worry about getting hit themselves until the salvos threw dust in their eyes. They also recognized the limitations of bombardment; that it stunned the enemy only for the moment and did not relieve the foot soldier from going in with rifles to clean up."

Everyone in the South Pacific breathed a sigh of relief when the New Georgia campaign was finally concluded successfully. But even while it was floundering along, plans were being made to hit the Japanese farther on up in the Solomons.

Kolombangara was bypassed. Vella Lavella was seized in an unopposed landing and the stage was then set for the next big jump towards Rabaul.

COMSOPAC had selected I MAC to conduct the next assault. The Shortland Islands, which intelligence said were defended by about 5,000 Japanese, was the assigned objective of Corps at the time it initiated its planning. For the operation the Corps would have available the 3d MarDiv, the 1st Marine Parachute Regt (less parachutes), a couple of defense battalions, a battalion of 155mm guns and one of 155mm howitzers, and other supporting and service units.

COMSOPAC indicated that there would be plenty of NGF ships of all types available to support the operation, so the Corps staff didn't spare the horses in drawing up their gunfire support concept for the operation. It included pre D-day bombardments of the Japanese defenses in the whole southern end of Bougainville-Shortland area, including fires by some of the fast new battleships which were operating in the South Pacific area. Intense pre H-hour fires were to be laid on the enemy before the beach assault. Adequate direct support ships were provided after H-hour to satisfy the needs of the troops ashore. A unique feature of Corps' concept for the operation was a surprise night landing on D-1 on Poporang Island. The purpose of this landing was to get the 155mm howitzer battalion and some shore fire control parties ashore and in position to support the H-hour landings and initial attack inland with observed gunfire and artillery support.

Before Corps was able to start working out all the details of its NGF plan, the Shortland's operation was called off. The Corps was

told that it would now make its landing up at Cape Torokina, 100 miles nearer to the great Japanese base at Rabaul.

In August 1943 I MAC headquarters began moving from Noumea to Guadalcanal to be nearer its troops and the III Amphibious Force Hq, which was to be the attack force for



Kolombangara—NGF tested

the projected operation. The Corps settled down in a grove near Teteri, within rifle shot of the 3d MarDiv and the 105mm range of the III Amphibious Force. This close proximity of the 3 principal headquarters involved in the Bougainville operation greatly facilitated all subsequent planning, and was a good illustration of the textbook teaching on amphibious planning. It was particularly fortunate for the Corps and Division NGF officers. From now on out, they were able to work in closest harmony in both planning and execution of all gunfire operations.

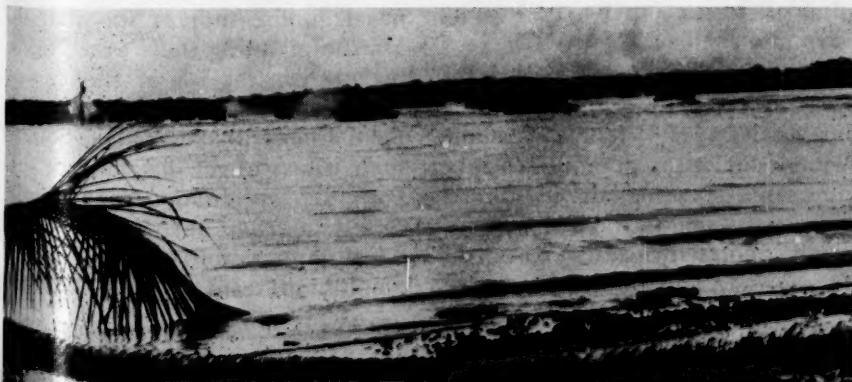
While planning for the Cape Torokina landing was getting underway, Division and Corps gunfire officers endeavored to do something to rectify the lack of joint training in NGF support by landing force and attack force elements. Despite encountering the usual obstacles which had handicapped all such training in the past in the South Pacific, they were able to make some progress. They first got a couple of the small

uninhabited islands around Ironbottom Sound and Indispensable Strait set aside as gunfire target ranges. Then they went out on these islands and set up some targets by nailing strips of target cloth between palm trees or draping the cloth over bushes. Thereafter, whenever they could get a ship assigned to them for a training shoot, they would put one or more of the 3d Division's shore fire control parties aboard and steam out to the island for a day's banging away. These exercises were decidedly informal but, nevertheless, had beneficial results for all hands involved. This training went on sporadically for a month or more and culminated in what was the biggest gunfire training shoot ever held in the South Pacific.

As soon as the word came out that the Japanese garrison had evacuated Kolombangara and left their defenses intact, I MAC put in a quick request to have a portion of the island on the eastern coast, which contained a considerable number of fortified positions along the beach and inland, set aside as a gunfire range. It was hoped that this would enable both the supporting ships and troops to get some practice in shooting at typical Japanese defenses, rather than at large white targets on little islands. By dint of much persuasive talking the Corps request was approved. Corps then tried to get the Navy to provide the ships for a good shoot at the new range. It was not able to get any battleships or cruisers (then or ever) but a bob-tailed DESRON was made available.

All officers and men from Corps Hq and the 3d Mar Div who were to be involved with NGF at Bougainville boarded the ships and shoved off for Kolombangara. The plan for the shoot called for both scheduled preparation fires and on-call spotter adjusted fires. The practice went off without a hitch. On its conclusion, the Marines concerned and the ships' skippers or gunnery officers went ashore to inspect the damage. They were happy to see that the preparation fires had chewed up the beach areas and that the on-call missions adjusted on the pillboxes and bunkers (by ship or shore spotters) had knocked out these heavily fortified positions.

Landing at Laiana under fire from enemy 77s



All this time, planning for the Bougainville operation and its satellite operations of Choiseul and the Treasury Islands, was moving along. Corps and Division were working hand-in-hand on an ambitious gunfire plan to present to the amphibious force. The 3d MarDiv was as fortunate as the 2d MarDiv on Guadalcanal in having in it a considerable number of officers of all ranks who had helped perfect our NGF doctrines and techniques in the pre-war FMF shoots at Culebra and San Clemente. Responsible commanders and staff officers at both Corps and Division were NGF conscious and wanted to get the maximum possible support from it. All hands working on the gunfire support plan wanted to make it a real demonstration of what gunfire could do to pave the way for the landing force when it was going in, and to support it after it was ashore.

The raid on Choiseul by the 2d Prcht Bn was to be a stealthy night landing, so there was no gunfire preparation or subsequent support planned for it. Corps did the gunfire planning for the landing in the Treasury Islands as the 8th New Zealand Brigade Group, which was to be the landing force, had no training or experience in gunfire planning or execution. While it was expected that the New Zealanders would be able to seize the islands without any great difficulty, there was the chance that the small Japanese garrison there would put up a stiff fight. This seemed especially true in the case of the Japanese unit bivouacked right near the village of Falamai, which was to be the site of the Brigade's main landing.

The gunfire plan that Corps worked out with the New Zealanders called for preliminary bombardment of the landing beaches on Mono Island and Stirling Island by ships lying off the entrance of Blanche Harbor. When the leading waves of the landing force started in on their run down Blanche Harbor to the beaches, Corps wished for one or two destroyers to steam along with them, taking the remaining beach defenses under direct fire. III Amphibious Force didn't go along with this and would not allow fire support ships of destroyer-size to enter what they called the "restricted" waters of

Blanche Harbor. They said it was too hazardous. (Later on D-Day, DDs *Phillip* and *Eaton* both had to enter the harbor to execute gunfire missions.) Amphibious Force also did not give the Corps the number of ships they asked for.

The fire support group on D-Day (27 Oct 43) in the Treasurys consisted of 2 destroyers, the *Pringle* and the *Phillip*. These ships began their preliminary bombardment on prearranged targets at 0545. The Marine Corps monograph on the Northern Solomons campaign makes these remarks about this firing: "Preparatory fire of the *Pringle* was delivered approximately according to schedule with good battery performance but no assistance, unfortunately, was obtained from the air spotter who subsequently reported a radio failure. While it later developed that much of the *Pringle*'s fire was too far back from the beach to be effective for the combined effort, she covered the remainder of the assigned area reasonably well, nevertheless. Preparatory fire of the *Phillip* was disappointing in accuracy, timing and quantity. At 0623, 3 minutes before assault waves hit the beach, the destroyers ceased fire."

Monday morning quarterbacking on this particular performance led to the inescapable conclusion that it hadn't done the job that a gunfire preparation should. It wasn't necessary to look far, either, to find the reasons. It was due in large part to the lack of training of the ships involved; to an absence of meticulous and detailed planning as to what the fire support was to accomplish, how it could be done and then finding the best way of seeing that the fire support did accomplish its mission. Fortunately for the New Zealanders, the failure to give them close-in destroyer fire support as they assaulted the beaches was made up to a considerable degree by providing 2 LCI gunboats to accompany the leading wave into the beach.

These staunch little ships did a bang-up job that morning, knocking out at least one Japanese 40mm twin-mount gun, several machine guns and spraying their infantry positions. The Marine Corps monograph quotes Brigadier Row, the New Zealand brigade commander,

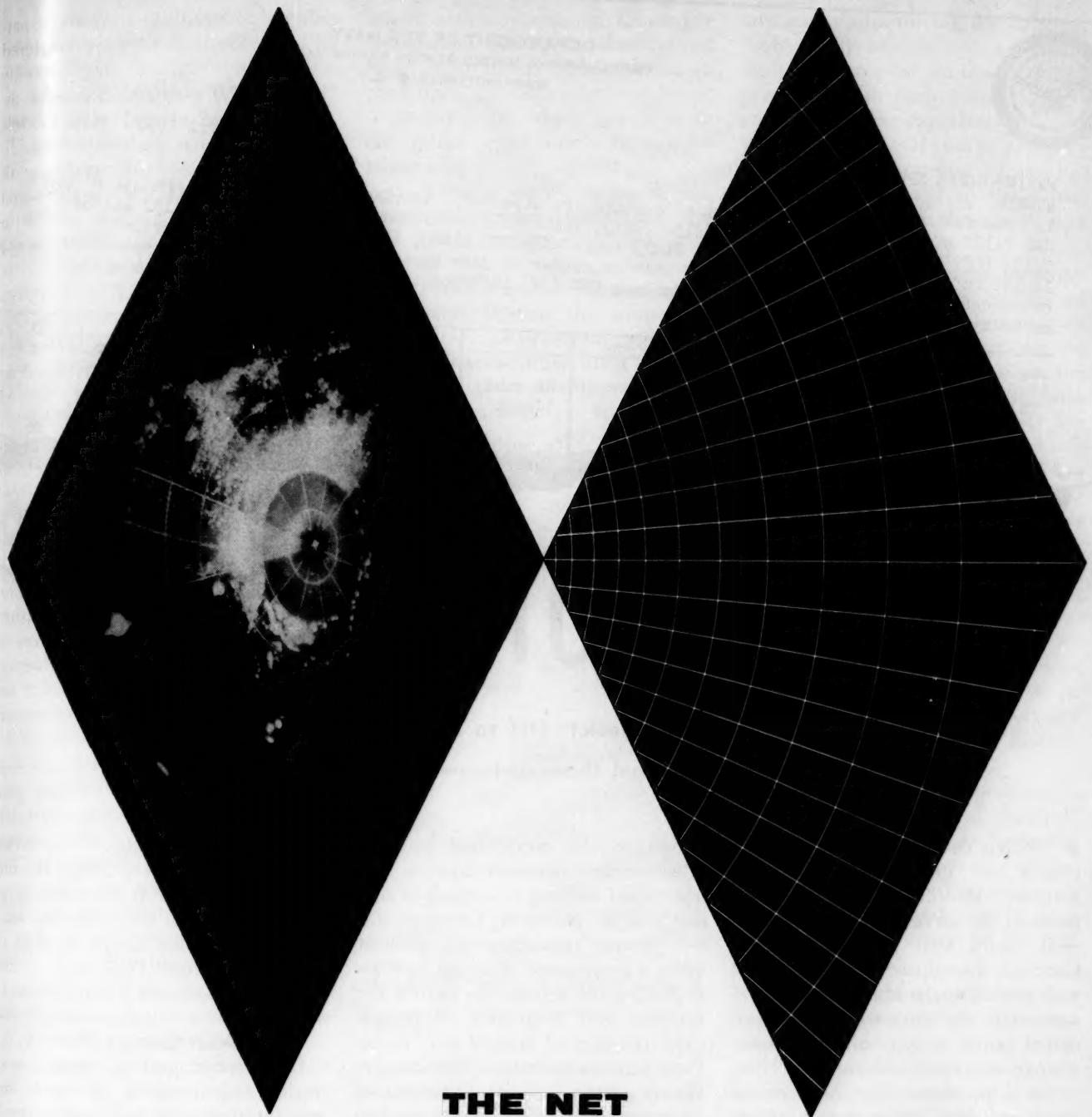
as saying this of the gunboats' operation, "The close support rendered by the LCI gunboats undoubtedly kept down casualties during the assault. These boats protected the left flank of the first wave and in addition shot at opportunity targets. One of them proceeded past Falamai Peninsula and raked that area with fire just prior to the landing of the 29th Battalion."

For any who cared to read the portents of this very small operation by tiny ships, it would seem that fire support ships accompanying landing craft practically to the beach, and delivering last minute accurate destructive and neutralization fires on beach defenses would do much to enable the assault troops to get ashore and stay ashore. To the Marines who had already recognized the requirements for this type of fire as an essential element of our preparatory gunfires, it was another demonstration of the correctness of their belief. Unfortunately, however, other commands in SOPAC didn't believe in it as yet. This was to cost us dearly at Bougainville.

As at Guadalcanal, the Central Solomons operations did not give the Marines a positive confirmation of the correctness of our pre-war gunfire doctrines and practices. But the failures experienced there when these doctrines and practices were not used, convinced us that they were substantially sound — if only we could get a chance to prove it. The successful results of the shooting at Kolombangara, and of the LCI gunboats at the Treasury Islands, could be accepted as a sound demonstration of the feasibility of, and necessity for, accurate destructive and neutralization fires of an enemy beach defenses right up until H-hour. Experiences at New Georgia further confirmed the belief that navies could cast off their morbid fear of shore batteries.

The best omen for the future of naval gunfire support was that the Marine planning staffs were "thinking big" on the use of gunfire support, both in quantity and quality. Furthermore, they were tenacious in their efforts to get that kind of support. Every disappointment only served to renew their efforts to get naval gunfire into harness on the amphibious team.

USMC



THE NET

America's most potent protective weapon has been announced by the Army.

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The system collects information on the position, identity and flight data of all aircraft entering the network. This data is stored electronically and distributed to display consoles in the Operation Center and at the missile batteries.

Thus, the activity of Nike batteries and other advanced weapons in the system are centrally coordinated and controlled.

This important new weapon system is one of the great defense developments of our time.

MARTIN



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON 25, D. C.

DFC/2647/ajk/crc/kfg

12 April 1956

MARINE CORPS SPECIAL ORDER
NUMBER. 72-56

1. The following permanent changes of station are directed. TravChar appn 1761105.18 MPMC-56 CC 029 EAN 74120 off tvl, 74121 cm1 tvl, 74150 (Off), 74160 (Enl Entl) depns tvl; CC 031 EAN 74152 and/or 74154 (Off), 74162 and/or 74164 (Enl Entl) trans HHE; BCN 41690, AAN 27 for detachments prior 1Jul56 and to appn 1771105.18 MPMC-57 with remainder of data as indicated above for detachments subsequent to 30Jun56. Off directed to keep CMC (DF) informed of their address at all times while on delay.

Name	Transferred From	ED	Report To	By
LtCol Willis L FAIRBANKS 011112 9901/0430	MB NB Chasn	RELBY & WD subq 1Jul56	Comdt MCS Quant w/30 days delrep for du & furas DUINS SrCrs FY57 C1 cvn Sep56 prd excess 20 wks Has TOPSEC clnc	27Aug56
LtCol Dan L HOOVER	For Temp FMFLant	On such	Comdt MCS Quant w/30 days delrep for do	

CHANGE OF STATION

Where away, Leatherneck? Off to Iceland's rocky shores!
What knucklehead drafted these orders—oh tempora, oh mores!

PCS IS THE PRESENT DAY MILITARY jargon for "Permanent Change of Station." However, from the viewpoint of the service lady of the house — it could well stand for "Pack Carefully Sweetheart!" Certainly the wife as well as the Marine has a vital interest in the when-where-why associated with a set of permanent change of station orders.

To supplement the concern of wives and Marines in general, Congress has expressed a deep and lively interest in the subject of permanent change of station. One tangible evidence of this interest was made manifest when a new military pay bill was passed which included provision for a Dislocation Allowance.

A dislocation allowance is a sum of money equal to one month's quarters allowance and is payable to qualified personnel with a family (dependents) who move as a result of a permanent change of station.

Congress was aware of the extra expenses incurred by the complete uprooting of an individual's family and the cost involved in getting settled in a new home and area. This

allowance was established to help alleviate the personal cost to the individual moving as a result of official orders. However, Congress did not provide this allowance without tying a large piece of string to it by requiring the services to reduce the number and frequency of permanent changes of station and to review procedures with a view to providing greater stability in personnel assignments. This legislation marked the first time that specific requirements of law have been placed on the services to restrict the movement of individuals. To date the Marine Corps has had no difficulty in complying with the requirements of the law in detailing personnel.

Few will argue the fact that frequent changes of station are expensive for the government and the individual. It is the purpose of this article to familiarize the reader with current assignment criteria as this

criteria applies to officers. In order to appreciate the reasoning behind detailing policies, it is essential to set forth a few of the problems with which the Marine Corps is faced in trying to reduce PCS and at the same time maintain a force-in-readiness.

What Causes PCS?

In analyzing permanent change of station requirements, the most important discovery one can make is an understanding of all the complex factors which motivate the requirement to transfer personnel. Even by careful concise study, proper evaluation and delineation of detailing problems are difficult. No real appreciation is possible until one is placed in the position of having to get the right officers in the right command or job, at the right time and in the right numbers! Superimpose on this the problems of a service scattered over the globe operating on variable tour lengths with a multitude of training requirements, while a major portion of its personnel are in a constant state of turnover.

By Maj L. L. Graham

The major conditions or requirements which are responsible for PCS are:

I. Reserve Lieutenants Whose Total Active Duty Tour Is 24-36 Months

The active duty requirements for these officers are controlled by policy and law. Officers in this category constitute about 33 per cent of the Corps' total officer strength. The main requirement for these officers is *training*! This means basic level instruction, and stateside or overseas Fleet Marine Force duty. The Marine Corps could not train and utilize these officers effectively for their short active duty requirement without their being transferred, as required, for their training and maximum use while on active duty.

II. Officers Assigned to Service Schools Requiring PCS

The Marine Corps must continue to maintain the formal service education of its officers at a high level in order to maintain efficiency and prepare officers for greater responsibility to meet rapid expansion in the event of wartime mobilization. All of these schools, with the exception of a few postgraduate technical training courses, are of something less than one year's duration. Although these school billets are filled wherever possible with officers who have completed normal tours, each of the officers must receive one PCS to and one PCS from school which results in 2 PCS for each officer in less than a year.

III. Personnel Assignment Readjustments Created by Continual Changes in Total Strength

It should not be necessary to explain that when the total officer strength changes, adjustments must be made to spread the reduction or increase. This creates a necessity to move personnel to spread talent or place individuals where they are needed. Otherwise, some units would be overstrength and others understrength or below desirable manning levels.

IV. Meeting FMF Requirements in US and Overseas

A major factor influencing the requirement to transfer officers is the necessity to maintain FMF unit T/Os and rotate FMF assignments.

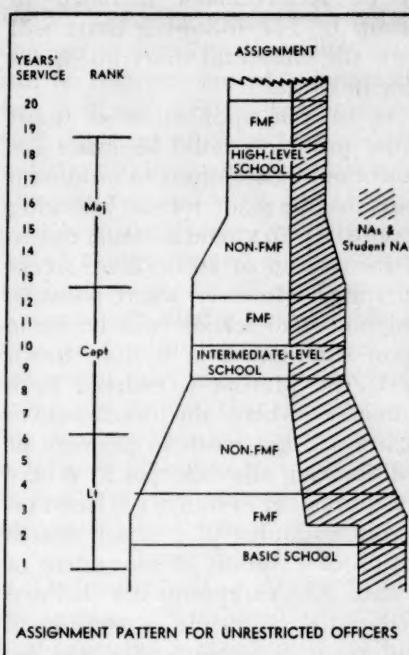
The above requirements actuate the majority of PCS. To the above requirements, could be added many

others such as, humanitarian, newly established billets, retirement and transfer to billet commensurate to rank upon promotion.

Theoretically, there are 2 main motivating requirements to transfer personnel:

1) Those transfers required, initiated and executed under the control of the respective military service, and

2) Those transfers dictated by requirements beyond the control of the military, i.e., hospitalization, release to inactive duty upon completion of obligated or contracted period of service etc.



Personnel assignment policies must be balanced against overall commitments. Therefore, assignment policies must be evolved, administered and executed to accomplish the Corps' mission and meet *commitments*. In essence then, PCS requirements actually evolve from basic conditions that are imposed upon the Marine Corps in order to carry out its normal mission, fulfill training needs and because of geographic deployment to meet the tense world situation. For example, the Marine Corps took advantage of the Korean action to let as many officers as possible prove themselves in battle. Close to 100 per cent of all majors and below saw Korean combat action. Large numbers of more senior officers were assigned to command

and staff duties during the fighting. This policy has created a tremendous reservoir of combat-seasoned personnel with both World War II and Korean war experience to meet future missions. Of course, as a part of this policy, rotation of combat duty was established to share hazardous duties even though such a policy shortened tours.

The assignment pattern for regular unrestricted officers established in the Marine Corps Manual provides for 4 years FMF duty in the first 12 years of service. Since the start of the Korean action, this ratio of FMF duty to non-FMF duty has been only slightly increased over this pattern for junior officers, but has been performed in shorter increments. When the 3d Mar Div was deployed overseas, and had to be maintained on a short overseas tour along with the 1st Mar Div and Air Wing, it was necessary for officers to start going back on second tours to keep rotation going. The resultant higher ratio of FMF duty has improved the training and increased the experience level of the individual officer.

There isn't much of a problem in the assignment pattern of obligated Reserve officers. They normally spend their entire 2 to 3 year obligation in the FMF. However, the cycle of continual losses and gains of these officers accounts for over 50 per cent of scheduled PCS.

Two major unit redeployments have taken place in the last year or so which are now being translated into longer tours for all personnel and will result in greater assignment stability than has been possible for the past 5 years. The 1st Mar Div has returned to the US. The 4th Marines and MAG-13 were homeported in Hawaii on 1 July 1955 and with the homeporting went the authority for dependents to travel to Hawaii. The effects of these redeployments with the increased tours possible, are now being felt in all commands and the overall average tour of the Marine Corps is increasing accordingly. The present deployment of Marine units on currently established tours, barring major redeployments or emergency conditions, will allow return to the approximate assignment pattern in the above chart which is a reproduction.

tion of figure 7-2, paragraph 7064, Marine Corps Manual.

Personnel Assignment Tangibles

When limitations were placed upon the conditions under which payment of dislocation allowance could be paid and Congress imposed an approximate 5 per cent reduction in the PCS part of the budget on the services for fiscal year 1956, it was determined that general statements of policy would not accomplish the requirement of living with the dislocation allowance part of the law and the dollars made available. It was therefore necessary to set forth tangible and realistic detailing and assignment guidelines expressed in minimum tours which, when applied, would keep the Marine Corps solvent and at the same time permit essential flexibility. As a starting point, an optimum tour length had to be established. A 2-year tour has long been recognized as compatible with proper rotation and variety of duty to develop and maintain a high state of training—thus a 2-year tour was established as the optimum tour length for a Corps-wide average. Any increase in this average would have to be attained by *increasing the short tours* and not by establishing the rumored 5-year tour. In other words, the Far East FMF tour of 14 months without dependents would have to be increased. Needless to say such a course of action is not desirable and would be resorted to only as an extreme measure. Dollar savings would seem a rather weak point in consideration of morale consequences.

Since a major portion of the Corps is in a constant state of turnover, and since there is the same initial

training requirement with the Regular as there is with the Reserve officer, it was decided to recognize this fact by grouping these officers together and separating their assignment restrictions from the more stabilized assignments possible for the career Regular.

For the purposes of PCS control, officers have been divided into two groups for the reasons just explained. Those Regular commissioned or warrant officers in their first 2 years' commissioned service or appointment, and 2 or 3 year obligated Reserve officers constitute Group I. Group II includes all commissioned or warrant officers, Regular or Reserve, not included in Group I. The following chart will show the minimum tours which are now in effect.

As in the application of most rules, provision must be made for exceptions. Exceptions to minimum tours may be made for the following reasons: 1) To attend a formal course of instruction of 20 or more weeks duration. (However, where possible, assignment to schools will be made upon completion of a duty tour); 2) If the Marine is ordered to a command where the execution of orders will not result in payment of a dislocation allowance; or 3) Where a requirement to transfer is based on decommissioning of a vessel, deactivation of a station, or movement of a unit. Any exceptions not outlined here must be carefully considered and are only recommended and approved where no other solution is readily apparent. If the PCS will involve a *second* dislocation allowance in the same fiscal year, chances are the individual will be the only

Marine in the Corps who can do the job—if he isn't the only man who can do the job, a recommendation to the SecNav for a finding of "an exigency of the service" which is necessary before issuing such an order, will not be forthcoming.

In referring to the below chart it must be kept in mind that the tours are only *minimum* tours except at duty locations overseas where dependents are not authorized. Completion of any given minimum tour does not of itself constitute sufficient reason for transfer. Sufficient time on station to meet minimum tour requirements will, of course, make an officer eligible for a PCS to meet operational, staff and professional schooling requirements of the Marine Corps.

Who Writes the Orders?

The theme that the individual Marine is the Corps' standard secret weapon has permeated the Corps' thinking since its establishment. The fact that every officer and noncommissioned officer is charged with the responsibility to retain a personal and individual approach to the men under his charge is doctrine. A system of personal monitoring for the career guidance of each officer in the Marine Corps is in effect at HQMC to assure that this doctrine is an established fact at the highest command echelon. The section charged with this responsibility is within the Personnel Department under the Detail Branch and is called the Officer Co-ordinator Section. There are 3 control units under the Officer Co-ordinator Section. They are, 1) The Ground Control Unit, which monitors occupational fields 01 through

MINIMUM TOUR CHART

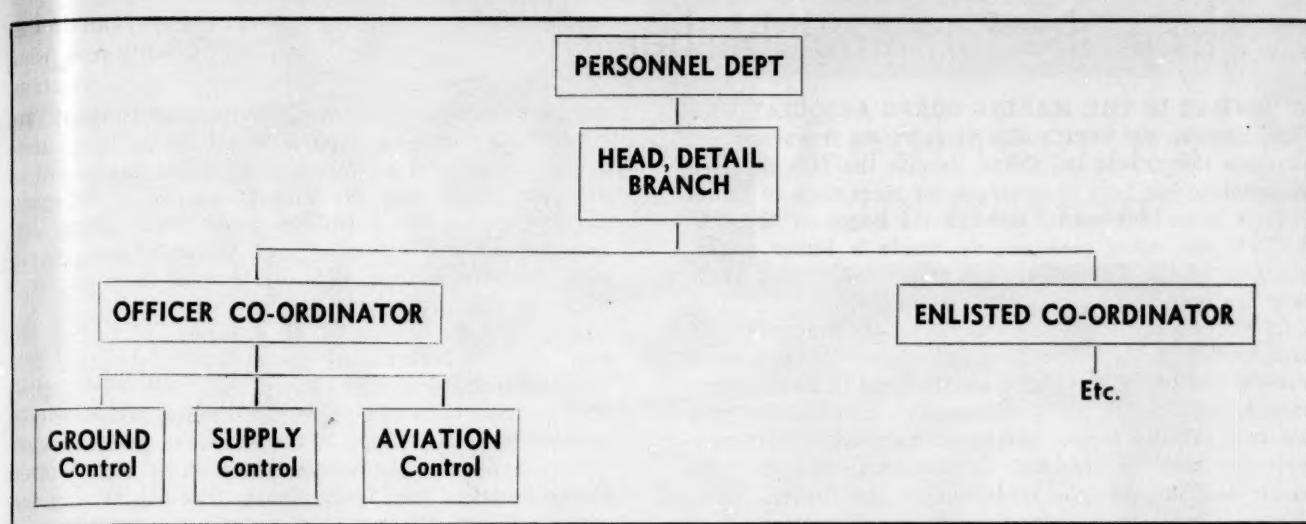
CATEGORY	GROUP I OFFICERS		GROUP II	
	(a) 12 mos	(b) 14 mos	(c) 12 mos	(d)
(1) Newly designated Reserve NAs and Regular NAs on first two years service out of flight training.				
(2) Newly commissioned Reserve officers and Regular officers on first two years service out of Basic School.	12 mos	18 mos	12 mos	
(3) Voluntary EAD and SWAG reservists.	24 mos	18 mos	12 mos	
(4) Regular officers after two years commissioned service or two years since designation as an NA.				24 mos

Column: (a) Minimum time on station required since last PCS.

(b) Minimum remaining active duty required for reserve officers upon detachment from old duty station to be eligible for overseas duty where dependents are authorized.

(c) Minimum remaining active duty required for reserve officers upon detachment from old duty station to be eligible for overseas duty where dependents are not authorized.

(d) Minimum time on station required since last PCS except where established tour of duty is less than 24 months.



27, and 35 through 58; 2) The Supply Control Unit, which monitors occupational fields 30 through 34; and 3) The Aviation Control Unit, which monitors occupational fields 64 through 73. Within each of the Control Units there are sub-units with an officer in charge who controls the assignment of officers holding certain military occupational specialties. This is the officer who applies the personal touch in detailing and who is responsible for monitoring the career of the officers within the occupational field or fields under his charge. He was selected for this important assignment after careful consideration of his own varied experience and intimate knowledge of the fields which he monitors. The number of officers under the control of each of the monitors is such that the volume of work is evenly distributed and allows more than a cursory consideration of each individual's case; in fact, it provides a system allowing adequate individual consideration for each and every officer from the time he leaves Basic or Flight School up through the various ranks.

The Officer Co-ordinator Section

The title of the section under which the control units just mentioned operate is particularly significant. The Officer Co-ordinator supervises and co-ordinates the assignment of all officers in the Marine Corps below the rank of colonel. The importance of this detailing provision is apparent when one considers that all personnel policy can be applied uniformly whatever an officer's primary or additional spe-

cialty might be. Required policy changes to meet changing conditions can be resolved and placed into effect without delay. Furthermore, such a system provides true co-ordinated centralized control and should provide the means, if any system can, to make the most economical use of manpower and eliminate lost motion in personnel assignments. Recent study of the many problems associated with the assignment of officers to meet the Corps' requirements has verified that the monitoring system presently in effect is manifestly efficient and produces effective results in personnel management and dollar economy.

Fitness Reports

The reader will recall that in filling in Section A on the fitness report that provision is made to set forth 3 preferences for duty. Perhaps the reader has wondered if anyone looks at these preferences especially when so many of us are so fickle that our choices change from one report to another. The fact is that these choices are very carefully and immediately recorded on each officer's detailing history card together with the reporting senior's assignment recommendation. Only the *current* or *latest* choice is recorded. Therefore, if interim bright ideas or wifely influences change previous choices, remember that your monitor only has before him the latest preferences. As pointed out, your choice is recorded and *considered*, but some officers let their (understandable) desires for duty run at cross purposes with proper career guidance patterns. That is, many will request what they shouldn't have! If you're

having this trouble, why not try specifying a geographical area rather than a type of assignment? For instance, requesting the West Coast will give your monitor a little latitude. After all, he is directly charged with your proper career guidance and must, within his capability, give you the right type of duty, but he won't know that you prefer a certain geographical location unless you tell him. If you're due for some non-FMF duty and you prefer an assignment to HQMC over Reserve Inspector-Instructor duty, say so. If you wind up with the I&I job it will be because your monitor has an I&I spot open and no requirement for your rank and MOS at Headquarters, or perhaps you have a record which indicates that you are particularly capable of handling an exacting independent assignment and a flair for meeting the public which I&I duty surely requires. At least he won't give you an assignment or a location opposite to that requested just to satisfy a whim or a diabolical scheme. He's human, and a fellow Marine with the same interest that you have in doing a good job. Be honest with the type of assignment you want — and concentrate on requesting what appears to be a logical assignment for proper career management.

The [then] Commandant of the Marine Corps, Gen C. B. Cates, said on 7 February 1951 in a letter to all General officers, "The success of the Corps in the past has been the result of the collective efforts of many individuals. Success in the future will be attained by the same type of effort."

USMC

... from the former Publisher

• WHAT IS THE MARINE CORPS ASSOCIATION?

This question has been, and is being raised frequently, by Marines throughout the Corps, despite the fact that the Association has been in existence for more than 40 years. Efforts have been made, through the pages of the GAZETTE and other mediums, to create a better understanding of the Association, and undoubtedly much headway has been made during the past year.

If you would understand completely the true worth of membership in the Association and support of its aims, a careful reading of those aims as expressed in its Constitution is helpful. ". . . to disseminate knowledge of the military art and science among its members, and to provide for their professional advancement; to foster the spirit and preserve the traditions of the United States Marine Corps; to increase the efficiency thereof; and to further the interests of the military and naval services in all ways not inconsistent with the good of the general Government."

With this statement of purpose as a guide, it is clear that support of the Association and its publication, the GAZETTE, is most worth-while. The Marine Corps cannot afford to be without it, and it would seem that a Marine could no more deny his support of the Association than he could refuse to wear the globe and anchor.

Our efforts to increase membership totals are justifiable — even essential — in that through these means it is hoped that a broader base of member-interest will be developed. With a much broader membership — one that encompasses all of the varied fields and sciences of the military profession — it is possible to draw editorial material of an infinitely greater variety and volume, in this manner increasing the general value of the Association and its publication to the membership. Without this broad and varied source of military material, it would be exceedingly difficult to publish a properly balanced and truly worthwhile military magazine.

Keeping in mind that any Marine — officer or enlisted — through the circumstances of his service and training, accumulates a fund of knowledge which should enable him to write on a matter of professional interest, the Association through the pages of the GAZETTE provides a means for passing this valuable contribution on to others. You are encouraged to make the effort for the benefit of all of us, and will be remunerated accordingly. For examples of subject matter, you will do well to consider those chosen for theses at the Marine Corps Schools.

In writing for a professional military journal, one principle to be observed is that, in general, some background thought and research must be done. Pure opinions, unsupported by facts, are usually a poor basis for an article. Avoid personalities — they seldom have a place in professional writing. Any effort to revive or continue interservice disagreements is undesirable, interesting though the questions may be. However, your article does not have to agree with what you consider policy matters approved by higher authority. The GAZETTE welcomes the "Pro and Con" approach to problems of a professional nature, and both sides, fairly presented, leave little chance for purely policy objections.

Your experience and training naturally utilize much that is classified in nature — and this material, as such, cannot be used. On the other hand, there are ways of presenting your ideas without quoting classified documents. Use past articles in the GAZETTE as a guide to an approach on this subject — you will find that interest

can be maintained without classifying the material. The GAZETTE uses essay-type material, rather than lesson plans; so material as found in classified sources is not appropriate although the thought behind it, differently expressed, may be. A little common sense applied here may well avoid rejection of your efforts for security reasons. Material dealing with any facet of future concepts of warfare is particularly desired.

During 1955, as a result of a number of factors that may not have been readily apparent to Association members, several steps were undertaken which had a direct bearing upon them in a professional sense. Amongst these was the increased tempo of the efforts to gain new members and to retain the old, as evidenced by actions of the Commandant of the Marine Corps. The membership dues were increased, although they are still substantially below that of many comparable magazines in the military field. The processing time for material submitted to the GAZETTE was reduced. Greater membership participation in the affairs and interests of the Association has been solicited. Promotional plans of a more permanent nature have been undertaken, such as the awarding of the officers' sword to a designated honor student of each Basic School Course — designed to perpetuate this symbol of the military officer in its highest meaning of leadership. New authors have been encouraged to contribute their best efforts to the GAZETTE in return for excellent rates.

Of those mentioned, the most prominent in the minds of the membership have been the necessary increase in membership dues, the increased efforts to gain new members and the encouragement of new authors. This report is primarily concerned with these matters in the hope that through it a better understanding of the functioning of the journal of the Association and the aims of the Association itself may be reached.

Basically, the reason membership dues had to be raised last year is that practically every commodity utilized in the production of a magazine has increased from 60 to more than 100 per cent in the years since 1944 — when the last increase in the dues went into effect. As a result, in order to meet these increased costs of materials and labor, it became apparent that at least a 25 per cent increase was necessary to offset the difference between costs and income. Not all of the difference could be made up that way, of course, and in order to avoid still higher dues, membership solicitation was extended.

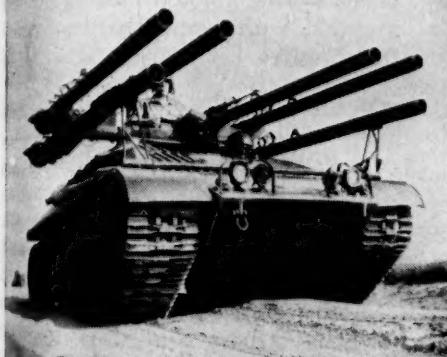
Along with the increased dues, every effort was expended to reduce the overhead costs of operation, such as shifting from envelopes to strip-list mailing methods. Admittedly, this is not preferable to envelopes in many cases, particularly when many people handle the magazine before its finally gets to its owner, but the money saved is substantial. Other economies not readily apparent were put into effect with the result that many thousands of dollars in reduced operating costs have been saved.

However the Association may benefit from economies in operation of its journal, it will only flourish if it is supported wholeheartedly by all ranks. It is not enough to read the GAZETTE — we must support the aims of the Association through membership dues, contributions to the magazines, and active consideration and promotion of its purposes. In the near future, plans will be announced looking toward increased activities on the part of the Association. You are invited to join us, and encouraged to offer constructive criticism or plans that you consider will be of value in revitalizing the Association. D. M. Cox

Engineering in Action



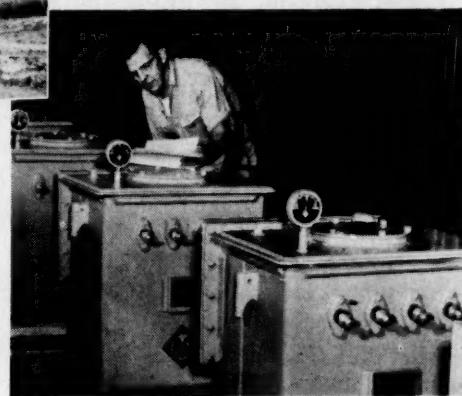
...AT WORK FOR THE ARMED FORCES



Ontos (Greek for "the thing"), a new highly mobile, anti-tank weapon, mounts six 106 mm recoilless rifles, four .50-caliber spotting rifles and one .30-caliber machine gun . . . goes into production at Allis-Chalmers this year.

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Soldiers of the past had their equivalent of USO shows and other amenities. But are we . . .

GILDING THE PILL?

By Maj R. Hargreaves, MC

*No other satisfaction do I crave
But only, with your patience, that
we may
Taste of your wine and see what
cakes you have;
For soldiers' stomachs always serve
them well.*

William Shakespeare.

IN TIMES OF PEACE SOLDIERING IS no tougher a job than many others, less tough than some. Providing a man gives his mind to his work while he is at it, and consistently maintains that high standard of personal and professional discipline which is integral to his calling, his work-a-day conditions compare very favorably with those enjoyed by men in a comparable way of life in "civvy street." So do his amenities, those little comforts and indulgences—from the garrison cinema show to the facilities afforded him by his Post Exchange or NAAFI canteen and retail store—which are at his everyday disposal.

Furthermore, of recent years a large-scale effort has been made to gild the pill of active service by transferring as many of these peace-time amenities not only to the theater of war bases, but right up into the combat zone itself. Never before has the man in the field been so buttressed with home comforts; and to compare the lot of the pres-

ent-day fighting-man with that of his predecessors is a matter of some interest. The proceeding, moreover, is not lacking in instruction.

By modern standards the day-to-day life of the soldier in early times was Spartan in the extreme. Rome's splendid infantry of the Legions, for example, observed a stern disciplinary code which made few concessions to human frailty. Even in times of peace the rank and file were not permitted to enjoy such amenities as a garrison town might be relied upon to furnish. For in the opinion of the authorities, "fortified cities were the refuge of weakness and pusillanimity." So, according to Vegetius, "the Legions were encamped on the banks of the great rivers, and along the frontiers of the barbarians;" in what amounted to perpetual bivouac. They were well fed and reasonably well paid; but their only amusements consisted of field sports, dicing—sometimes with their wine ration for the stake—and a very occasional cock fight.

Early medieval armies, "living at free quarters" on the countryside over which they were fighting, were in small need of intervention on the part of the authorities to ensure that they had access to such amenities as were available. They just went ahead and helped themselves to whatever was at hand.

Sometimes they were in clover; more often than not they were reduced to scratching together something that passed for rations. During their all-too-frequent lean times they were prone to sing a doleful ditty, as they huddled with empty bellies about their smoky camp fires.

"And the first thing they pray for is
a pound of good steak,
And if we have one pound, may we
always have ten;
'God send us a bellyful,' says the
soldier, 'Amen'."
"And the next thing they pray for is
a pint of good ale,
And if we have one pint, may we
always have ten;
'God send us a bellyful,' says the
soldier, 'Amen'."

The song was still being sung by British troops right up to the days of the American War of Independence.

When it became the practice to collect supplies of food, drink and forage in central "magazines," so that they could systematically be distributed by the Provian-Master, the demand still persisted for those little "extras" that so agreeably vary the monotony of staple rations. Since no demand continues for long without somebody coming forward to make money out of meeting it, this craving for something over and

above the basic necessities was soon met by those individual local traders who came to be termed sutlers—a word derived from the Dutch, signifying someone who plied a mean and petty trade. A corner of the camp or bivouac would be reserved where the sutlers could erect their lean-to booths; and this market was put under the control of the Provost Marshal.

By the terms of the contemporary *Rules and Ordinances of War*, the Provost Marshal, after making camp and indicating the appropriate pitch for the sutlers, was required to fix a tariff of prices, to remain in force throughout the period of the army's halt. This was a matter of some delicacy. For if he made the prices too high, he offended the men of the rank and file; if too low, he alienated the sutlers on whom the camp relied

for its little luxuries. But the tariff once fixed, there was no paltering with it. For the Provost Marshal was also under obligation to erect a gallows in the center of the market, both as a symbol of his office and as a broad hint to the light-fingered and the sutler with a gnawing urge to overcharge. The Provost Marshal was assisted in his duties by a certain number of tipstaves, whose business it was to keep order in the market area; and their principal was rewarded for his pains by certain perquisites, such as a small fee for every beast slaughtered and every cask of liquor broached.

That the sutlers did pretty well for themselves, despite the sharp eye kept on them, is made remarkably clear by Shakespeare's opportunist soldier of fortune, Pistol, who exclaims, in a moment of fretfulness

regarding the pitiful rewards to be won by the sword:

" I shall sutler be
Unto the camp, and profits
shall accrue."

And Shakespeare, through the mouth of Pistol, obviously knew what he was talking about!

It was the Swiss, German and Spanish mercenaries, so prominent in the wars of the 15th and 16th Centuries, who first took to carrying their sutlers with them, as a permanent part of their train of camp followers. Since they fought only for what they could make out of it, they had plenty of money, which they were prompt to spend on day-to-day indulgences. The itinerant sutlers, who everywhere accompanied these battle-hardened Free Companies, afford the first example of an attempt to render amenities accessible to the soldier on a liberal scale and with some sort of regularity.

THE FIRST embryonic standing army was established by the French King, Charles VII in 1444. Britain followed suit with a small but rapidly expanding force of Regulars in 1660. By the time of the campaigns of the Duke of Marlborough, of 1702 to 1712, there was a sound organization for field supply—although only bread was issued by the Commissaries. All the other basic commodities—meat, bacon, cheese and butter—were retailed by licensed sutlers against a weekly stoppage from each man's pay. It was the responsibility of the regimental Seconds-in-Command to ensure that no cheating took place over weights and measures, and that goods were sold at fair prices. A pretty sharp eye was kept on the traders generally, for one Standing Order ran: "Any sutlers who refuse to change the men's money, or demand a reward, or oblige them to drink, in order to get their money changed, shall be plundered and turned out of camp." There were plenty of opportunities for legitimate trade at a fair profit, since the sutlers were responsible for furnishing those extras—such as tobacco and cheap liquor—the soldiery could contrive to purchase out of their meagre wage. But in addition to the regimental sutlers,

Roman Legion—an occasional cock fight for entertainment



certain free-lance members of the fraternity were allowed to "follow the drum" and set up their booths on the fringes of the camp.

Oddly enough, one of the most faithful of these indispensable camp followers was a woman, who originally had enlisted in a cavalry regiment, fought in several engagements and been twice wounded before her real sex had been revealed. Refusing to abandon life with the army, Mother Ross (as she was called) adopted the role of sutler; and although she turned a pretty penny catering for the wants of the officers, she was equally ready to supply the modest needs of the man in the ranks. Nothing pleased her better than to trade a choice piece of loot for a pound of tobacco, a tender young suckling pig, a basket of eels, or a prime bottle of schnapps.

But the "Old Adam" died hard in Mother Ross. On one occasion, having brought some comforts right up to the forward trenches in front of beleaguered Ath, she could not resist taking a pot-shot at one of the enemy, who had carelessly exposed himself. What is more, she got her man!

When the campaigning season was over and the troops retired into winter quarters, they were accompanied by their official sutlers, who continued to supply them with their necessities and small luxuries. Trade in the latter fell off somewhat, since both liquor and tobacco were to be found in the garrison town's many inns. In any of these snug taverns a thoroughly convivial evening could be enjoyed for the expenditure of no more than a penny. All too soon the drums would beat the "Tap-to," (from the Dutch, *de Taptoe Slaen*; literally, the taps are turned off. This was the hour—8 o'clock in winter and 10 o'clock throughout the summer—at which the innkeeper turned off his taps and ushered his guests, soldiers and civilians alike, into the street) the order for the men to "retire to their chambers or quarters, to put out their fire and candle and go to bed."

IN TIMES OF PEACE there were no sutlers, for the sufficient reason that with the exception of a few fortresses there were neither barracks nor permanent camps. The soldier was billeted in ale-houses and fed

by the inn-keeper against a stoppage from his pay. If he were in foreign garrison in North America or the West Indies, the chances were that some old, discharged "private centinal" would obtain permission to open a booth for the sale of liquor, tobacco and other small luxuries. With the preponderance of salted provisions in the contemporary rations, he invariably plied a brisk and lucrative trade. For this was an age wherein liquor was so cheap that the baser sort of taverne could display a sign announcing,

DRUNK FOR A $1/2$ d.
DEAD DRUNK FOR A 1d.
CLEAN STRAW EVERY
MORNING

In North America the British soldier took very kindly to rum-bullion, or rum; and was quite pre-

pared to make do with the cheaper New England variety if prime Jamaica was not available. After the second siege of Louisbourg in 1758 the delighted Massachusetts colonists so royally indulged their own Provincial troops and the once-dreaded "red-coat" that there was scarcely any service left unattended that a sutler could have rendered them. General Jeffrey Amherst wrote home rather plaintively to the Prime Minister to the effect that, "I could not prevent the men being filled with rum by the inhabitants, who are loud in their satisfaction of what we have done."

In the ordinary way, that poor profligate wretch, the soldier, was held in small regard by a civil population who looked upon him as an outcast and a wastrel. But one dis-

A wayside tavern — forerunner of the pogey-bait machine



tinctly unusual instance of private benevolence on his behalf occurred at the time of the Jacobite rebellion of 1745. With Bonnie Prince Charlie and his Highland following swarming over the Border, troops were hurriedly sent north from London to bar his way. It was a particularly cold and blustery September, and the contemporary soldier's outfit did not include a greatcoat. So in a burst of practical patriotism the Society of Friends, or Quakers, came forward with an offer to furnish every man with a waistcoat "of the best flannel;" and the garments were duly fashioned by the firm of Isreal Mauduit at cost price. Not to be outdone, the city merchants started a subscription list to provide "a set of blankets and palliasses for each tent, 30 watch coats, and a pair of worsted gloves to every man." It is surprising how generous solid citizens can be when they have really got the wind up!

It was a very different story throughout the War of Independence. Washington's forces were hard put to come by bare necessities; and, with certain honorable exceptions, not a great deal was forthcoming in the way of private benevolence. Provision was made when in camp, however, for one sutling booth with each brigade, whereat liquor might be sold at fixed prices. The British had their canteens too; although the Orderly Book of General Howe included an Order to the effect that sutlers should supply liquor only to the men of their own respective regiments, and not to visitors or soldiers from other formations. A stern note was added to the effect that, "Women belonging to the Army convicted of selling spirituous liquor will be confined in the Provost till there is an opportunity of sending them away from hence."

For those who had a taste for amenities of a different kind, a number of theatrical entertainments were organized, both in New York and Philadelphia, by the versatile Maj John André. At New York's John Street Theater — rechristened the Theater Royal — Shakespeare's *Othello* alternated with *The Rivals* and *The Lying Valet*. André not only produced and played the leading part, but also painted the

scenery; while music was provided by bandsmen from the Hessian regiments. In Philadelphia the "Mischianza" organized by way of a farewell to Gen Howe on his relinquishing his command, was a most elaborate affair, in which all ranks found infinite relief from the ordinary monotonous round. There were extra rations and liquor for the men, a regatta and a tournament, and a grand fireworks display by way of finale.

One of the amenities permitted an 18th Century army was the presence on active service of a quota of women officially "married on the strength." Six wives per troop or company, selected by lot, were allowed to accompany their menfolk overseas; and once arrived in the theater of war a regiment soon acquired a host of unofficial female camp followers, whose attachment to the men with whom they had consented to link their destinies was amazing in its staunch fidelity. Travelling in company with the cooks and scullions in charge of the pots and pans, they formed part of that "black guard" by which the baggage train was so enormously swollen. Burgoyne's army, which set out from Canada for Albany in 1777, mustered no more than 7,300. Yet there was a "tail" of unauthorized followers numbering close on 2,000, a heavy proportion of them being "campaign wives."

But this was nothing compared with the state of affairs that prevailed in India a little later in the century. When the army of Gen Harris and Arthur Wellesley, (future Duke of Wellington) 22,000 strong, moved out for the capture of Seringapatam, for instance, the "tail" of camp followers actually outnumbered the troops. Harris's army started out with no less than 200,000 bullocks, with a comparable number of elephants, horses and asses. The whole force marched in a hollow square, with a front of 3 miles and a depth of 7. Amongst this multitude there were many native sutlers only too ready to peddle cheap cheroots, palm toddy and the potent arrack — distilled from the flowers of the mahus tree — with a woman go-between, like as not, to smuggle extra supplies of the liquor into camp after Lights Out. These rather

shifty native sutlers had come into being as the result of a short-sighted regulation to the effect that no ex-soldier or ex-soldier's wife should be licensed as a sutler.

When Sir Arthur Wellesley started his 6-year campaign against Napoleon's Marshals in the Iberian Peninsula, there were no local contractors, as heretofore, to furnish supplies and transport. The Commissariat had to improvise a supply system from the ground upward; and it was a long time before the question of sutlers could be dealt with satisfactorily. In the interim, the British soldier, accustomed to lowering his mild English ale by the pint, entirely failed to grasp the fact that if he adopted the same methods with the cheap, rough, but potent, wines of Portugal, he was bound to end up in the hands of the Provost Marshal. This state of affairs was not bettered until Wellington (as he had become) ensured that every regiment or battalion should be provided with a sutler, complete with 2 pack mules to move his stores. But the available quantity of sound English beer and Limerick twist tobacco were never equal to the demand, since insufficiency of shipping and the abominable condition of the roads ruled out the transport of anything like adequate supplies. In few campaigns has the soldier lived a more Spartan life — or thrived on it better.

As in North America between 1776 and 1778, the Peninsular campaign was lightened now and then by amateur theatricals; an empty chapel at Galagos being fitted up to stage several performances of *She Stoops to Conquer* — with an all-male cast — preceded by the "roaring farce" entitled *The Apprentice*. But as Capt Kincaid of the Rifle Brigade ruefully records, "the Church authorities have got to hear of the liberties taken with their building, we were all regularly cursed from the altar by the Bishop of Rodrigo," and further performances had to be abandoned.

The usual drabble-trail of soldiers' wives had accompanied the British Army to the Peninsula; but in numbers they did not begin to compare with the swarm of women — most of them of very doubtful character — who went everywhere with the



Cantinière—1794

French. In conversation with Wellington, a Gallic officer trying to excuse the defeat his side had suffered at Vittoria, dolefully exclaimed, "Le fait est, Monseigneur, que vous avez une armée; mais nous sommes un bordel ambulant!"

A more generally useful female with the French armies was the *cantinière*. Functioning on much the same lines as the British sutler, she was usually a motherly old soul, married to the *mérechal des loges* or some equally senior NCO, and with a son, like as not, among the regimental drummers. A real "old soldier," her loyalty to the formation with which she remained throughout the whole of her service was as pugnacious as it was inviolable.

IN ENGLAND, it was not until 1792 that the construction of barracks was put seriously in hand. But by 1815 some 200 new buildings had been added to the 43 old fortresses—such as the Tower of London—already in existence. Gaunt and uninviting as most of them were, they at least included accommodation for a "wet" canteen; while in many of them space was reserved for a bowling alley. This pleasant outdoor amenity, provided at the instigation of the fatherly Duke of York—the only Commander-in-Chief to be nicknamed "the soldier's friend"—furnished a welcome change to the perpetual tippling, which was actually encouraged by the terms con-

cluded between the Board of Ordnance and the contractors who tendered for the right to run the canteens. For under the prevailing system the sutler paid a rent charge known as "privilege money"—based on the number of men in barracks at the beginning of the month. But since the 3-year contract was put up to competitive bidding, the successful contractor had to pay out a sum for his tenancy which he could not hope to recoup by honest trading. It was the soldier-consumer who suffered, by being condemned to put up with shoddy goods and inferior liquor, which last-named he was always being pressed to consume. That he fell an easy prey to the sutler's blandishments is witnessed by the fact that the unconscionable Board of Ordnance pouched an annual profit of over £50,000. Such were the fruits of encouraging a monopolistic enterprise to which the welfare of the customer was the very last consideration. For although one or two well-intentioned efforts were made to follow Gibraltar's example, where a garrison library had been formed in 1804, literacy amongst the rank and file was not on a scale to encourage the expansion of such facilities.

In the long years of peace that followed on Waterloo, the Britisher smoked his cutty clay and swilled his ale, as he watched the "woods" trundling smoothly over the emerald turf of the bowling green; the Frenchman gulped his *vin ordinaire* under the motherly eye of his *cantinière*; while the German alternated pulls at his *Bierstein* with snatches of sentimental song, sung softly in chorus. Even so early as the days of that stern disciplinarian, Frederick the Great, James Boswell, on a tour of Germany, noted that while dining with the Captain of the Guard at Potsdam, "the common soldiers placed themselves on a seat before the guard room and sang most merrily."

In 1854 the long peace was broken by the Franco-Turkish-British combination against Russia, which was fought out in the Crimea; and seldom can a campaign have been undertaken with so little forethought in the matter of its organization.

When the troops in the trenches—in their summer uniforms in mid-

winter!—were being issued with hunks of raw meat, but neither fuel nor cooking vessels; with green coffee beans, but with nothing to grind or roast them with; such things as the smaller amenities were bound to be neglected. The French had their *cantinières*, and their Commissariat was run with real efficiency. But they could be of no help to their allies. In due course, a swarm of predatory, unscrupulous Levantine hucksters arrived to set up their booths all along the rough thoroughfare that ran for 8 miles from Balaclava harbor to the camp before Sevastopol. But—perhaps fortunately—the prices they exacted for their few shoddy goods and appalling rot-gut liquor were so exorbitant as to put everything out of reach of all save those with exceptionally well-lined purses. It was not until midway through 1855 that the news got around that a "hotel" was in course of erection on Spring Hill, about 2 miles inland from the Balaclava base.

The moving spirit behind this welcome enterprise was a little Jamaican woman of the name of Mary Seacole. Her offer to help nurse the wounded having been somewhat brusquely turned down by Florence Nightingale, "Mother" Seacole had hit upon the brilliant idea of erecting a central canteen, open to all ranks, where the amenities so long denied the long-suffering troops would be readily available. A long general room, with counters, closets and shelves, a dining room, kitchen, pig-sty, fowl-run and store houses were speedily run up by two venerable naval carpenters, known respectively, as Big Chips and Little Chips; and from the opening day the place hummed with activity like a beehive.

But busily occupied as she might be, "Mother" Seacole invariably found time for a visit to the rough and ready field hospitals, where her punctual appearance, bright parasol in one hand and a huge basket of comforts in the other, was an ever-welcome sight to the sick and injured awaiting transfer to the base sanatoria at Scutari. But there was a lighter side to her labors which no one enjoyed more than "Mother" Seacole; as when an attempt at theatricals demanded the little

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Jamaican's expert assistance in lacing up the corsets of the smooth-faced subaltern cast to play the leading female part. It was a congenial task in which she persisted until, as she gleefully recorded, "the poor lad was pretty near blue in the face."

Another example of private enterprise coming to the rescue took the form of many hundreds of knitted woollen waistcoats and "Balaclava helmets;" the first-named being named after the kindly woman who organized the "Zenanas" full of clicking needles that turned them out—Lady Cardigan, wife of the commander of the Light Brigade.

As the original chaos yielded to something a little more like order, the Crimea even saw the English playing their beloved cricket. Furthermore, there were several inter-allied race meetings; although the jumping competitions organized by the French were thought very poorly of by the British cavalry, who found "the hurdles not sufficiently high to puzzle an intelligent and active poodle, the ditches like trenches in a celery bed, and the wall about 2½ feet high."

"CARDIGANS," on the Crimea pattern, made their appearance, in due course, in the War between the States; as did the linen cap-covers with a neck shade. At the outset, however, supply arrangements were little short of chaotic; the provision of small amenities being out of the question. With the sudden and stupendous expansion of the microscopic forces available, nothing else could be expected; first things had to come first, and the trimmings followed a long way after. It was not, indeed, until Dr. Henry Bellows and Frederick Law Olmstead got to work and put the Sanitary Commission on its feet, that conditions improved. Not only did the Commission take over responsibility for hospitals, field ambulances and the distribution of many supplies, but it installed its own canteens wherever they could serve a useful purpose.

During Grant's Fredericksburg operations, for example, one such Commission was established at Belle Plain and three more between that focal point and the army's forward positions.

The good work of the Sanitary

Commission was as much appreciated by the officers as by the rank and file; for the former, not being included in the ration strength, had to provide themselves with subsistence as best they might, and it was not always easy to come by even when they had succeeded in drawing enough back pay to permit them to make a few purchases. It was when provisions were practically unobtainable that the Sanitary Commission so often came to the rescue. For as Capt John William de Forest, of the 12th Connecticut Volunteers, gratefully recorded in his *Journal*, it was the Commission that supplied him with food at Georgetown Heights in the July of 1864.

THE *vivandière* made her appearance in the armies of the Emperor Louis Napoleon, and was primarily concerned in rendering first aid to the sick and wounded.

The Franco-Prussian War of 1870-71 saw French *cantinières* and German marketenders in the field to furnish such small amenities as they could manage to transport; although the flow of comforts provided by private benevolence or public subscription was far greater with the Teutonic forces than with those of their adversary.

In the meantime considerable progress in the provision of amenities had been made in the British Service. A very distinguished officer, Gen Sir Henry Hardinge, had put forward the eminently sensible suggestion that the profits from canteen sales should be administered for the benefit of the men of the rank and file, and the proposal found growing support. Equally, there was general approval for the recommendation that the garrison blocks—such as those in course of erection at the new military center of Aldershot—should include recreation rooms and fives courts; with cricket and football grounds and gymnasiums, in close proximity. When completed, the Aldershot lines did include recreation rooms fitted with a stage, as well as "dry" and "wet" canteens.

But it was not until 1863 that the running of the canteen was taken out of the hands of civilian profiteers and handed over to the control of a regimental committee, appointed by the commanding officer; with stewards and other helpers selected



Vivandière—1860

from a waiting list of old soldiers. With these reorganized institutions the whole of the retail profit was administered for the benefit of the men. In many cases the system worked reasonably well; but with supervision in the hands of officers lacking experience in the ways of commercial chicanery, innumerable abuses grew up; the standard of goods was not always all it might have been, while many dishonest stewards and bribe-taking minor functionaries nefariously feathered their respective nests.

As so often before, in one capacity or another, it was the ordinary regimental officer who came to the rescue. Realizing that only bulk buying on competitive terms opened the way to keeping prices down and quality up, several relatively junior officers collected a modest £400, and with this capital founded the Canteen and Mess Co-operative Society. Under its rules, no individual was allowed to hold more than £200 worth of shares; the interest thereon being limited to 5 per cent. All profits in excess of that interest were to be returned, by way of rebate, to the regimental canteens that were its customers.

The scheme prospered from the outset; and the experiences of the South African War clearly demonstrated its superiority over the regimental tenant system whereby the contracts for liquor, tobacco and other sundries were put out to tender. For all that, the pernicious

"tender" method of supplying the soldier's small needs persisted in rivalry with the C & M Co-operative Society until a particularly unsavoury scandal threw such a lurid light on the viciously corrupt manner in which the former was conducted, that demands for reform could no longer be denied.

The increase of business occasioned by the outbreak of the 1914-18 war absolutely flooded the C & M Co-operative Society with work, and nobly it responded. Indeed, it was upon its wide experience and proven methods of organization that the hurriedly convened, but official, Navy and Army Canteen Board founded the Expeditionary Force Canteens. How great was the need for providing amenities, and how admirably that need was met, can be appreciated by comparing the figures for sales for the first 6 months of 1915, which stood at 3 million francs, and those for 1918, which topped 223 million francs. Thus with the end of the war, after all debts had been settled and the British, Dominion and Colonial forces had been allotted their respective shares of rebate, there remained £7,000,000 to be handed over to the United Service Trust for the benefit of ex-service men.

The war years had been fruitful in many lessons in canteen management, supply and distribution, from which the British were not the only service to profit; Gen James G. Harbord paid a generous tribute to the benefit gained by the parallel US organizations from the study of methods already proven in the field. In the outcome, the Second German War and the subsequent campaign in Korea found British troops as capably catered for by the Navy, Army and Air Force Institute as were the Americans by their Post Exchanges and subsidiary bodies.

At long last, amenities—in the widest sense of the term—were provided on such a scale as to raise an irrepressible doubt as to whether the whole thing had not been rather preposterously overdone.

In his admirable book *The Good Soldier*, Field Marshall Lord Wavell, with all the weight of a lifetime of experience, deliberately affirmed that, "Soldiering in the ranks on active service always has been, as it is now,

a hard, testing business, requiring for success a hard, tough man. And," he goes on, "the difference between the old type of soldier and the modern type is, that the old soldier was tough, the modern type has usually to be toughened."

With the increase of urban populations, the intake of a national army must show an ever-expanding proportion of townsmen, unaccustomed to the hardship and frugality which characterizes the country-dweller, and therefore, in all the greater need of toughening. This absolutely vital process can never be accelerated by embroidering it with such irrelevant distractions as mobile canteens, cinema vans, radio sets, troupes of film and theater stars, Coca-cola, pin-up girls and rations including such frivolous trimmings as chocolate biscuits, salted nuts and toilet requisites that are less appropriate to active service than to a beauty queen's boudoir. To furnish such superfluities as these—especially when fighting an enemy prepared to live on the smell of an oily rag—needlessly congests the roads and lines of supply, usurps valuable shipping space, wastes gasoline and absorbs the energies of a small army of men who could be far more profitably employed elsewhere. No wonder that the divisional slice reveals one man in direct contact with the enemy and 25 others engaged, more or less worthily, in supporting him.

In effect, in this particular aspect of "welfare" it is necessary to "be cruel only to be kind," by refusing to cosset the fighting-man, so that when the moment comes—as come it will—when it is physically impossible to supply him with anything but the barest necessities, his morale will not suffer because he has suddenly been deprived of a lot of "frills" to which he has foolishly been allowed to grow accustomed.

It is impossible to assimilate the fact too early that in warfare the pill, more often than not, has to be swallowed down without any sugar-coating.

In cold fact, the fighting-man on active service can get along perfectly well so long as he is supplied with plenty of good, wholesome food and a generous tobacco allowance, and there is no hitch with regard

to his mail. There are plenty of veterans of Korea to bear witness to this, as would the Marines of Iwo Jima, Wingate's Chindits, the men of the Malayan jungle patrols, or even the survivors of the initial landing on the Gallipoli peninsula in 1915. (For the first 4 months after the initial Gallipoli landings, the troops were down to absolute basic rations, with very little water and a marked scarcity of tobacco. Yet it is the present writer's recollection that they were fighting-fit and remarkably cheerful.)

The Roman soldier carried out his peace-time training with weapons and equipment of just *double* the weight of those he employed on active service; an excellent method of tuning him up to a condition in which he would bear the rigours of campaigning with unruffled equanimity.

Something of the same result would accrue were troops to be given the opportunity, in times of peace, of finding out exactly how they got along if reduced to bare essentials. If two months were devoted in every year to an exercise in which the battalion set off into the blue, knowing that it would be compelled to carry out every task designed for it on basic rations, and basic rations only, much good might result. For by this draconic, but salutary, process it would speedily be discovered who possessed the fundamental qualities of fortitude and sufferance—which Gen George Monck maintained were the fighting-man's essential attributes. Field Marshal Rommel once laid it down that, "The best form of welfare is a superlative state of training," and it will be recalled that there was no ratio of 1:25 in that extremely tough formation, the 'Afrika Korps.'

By some, no doubt, an experiment on the uncompromising lines suggested would be regarded as unnecessarily drastic. Perhaps it would not be inappropriate to remind such doubting Thomases that when the Spartans were at the height of their power and military glory, they sent a deputation to the Oracle at Delphi, to demand, "Can anything now harm Sparta?"

Sternly the Oracle replied, "Yes—luxury!"

USMC

in brief

WHAT IS THE BEST TRAINING for nuclear warfare? Strange as it may seem, says Field Marshal Sir William Slim, "stalking terrorists in a Malayan jungle."

"The use of new weapons and technical devices can quickly be taught — to develop hardihood and initiative, mutual confidence and stark leadership takes longer."

He thinks that determined troops who are prepared to jettison all but fighting essentials will be able to make their way safely through even the chaos of atom bombing.

Victory will go to the tough, resourceful infantryman — but the easier, more gadget-filled life becomes, the harder it will be to produce him. The Field Marshal is firmly against the raising of special forces, or so called corps d'elite. Any well trained infantryman, he says, should be able to do anything a commando can do.

PROOF OF THE FACT that the helicopter is rapidly becoming an aerial workhorse is borne out by its latest role in the Navy. Utilization to tow a 300-ton floating yard salvage derrick, proved the advantage of using helicopters for aerial mine sweeping. Demonstration tests of a modified Bell antisub helicopter indicated the great towing ability of the HSL.

The Navy considers the use of the helicopter as a mine sweeper a major contribution to the solution of its problem of keeping sea lanes open.



IT WAS REVEALED recently that the Army has "domesticated" atomic weapons for localized warfare by developing new "low-yield" atomic arms with limited power and a negligible fallout.

The new weapons, in which the explosive material is packed, are the first atomic weapons which can be used locally. They are: the Sidewinder — a hand-carried missile which resembles an oversized bazooka that can be used by an infantry squad. The Moritzer — a completely mobile mortar mounted on a light tank chassis and firing an atomic shell, providing slightly heavier atomic fires. Also a helicopter mounted 155mm recoilless rifle which fires an atomic shell for "hit and run" air operations. These new weapons are highly mobile and accurate, designed primarily to be used against enemy troops on the battlefield. The new weapons have been designed, and their atomic cores test fired in Nevada. The quantity and date of manufacture of these weapons remain controversial questions among military planners, but reliable sources feel that they could be in production by January.

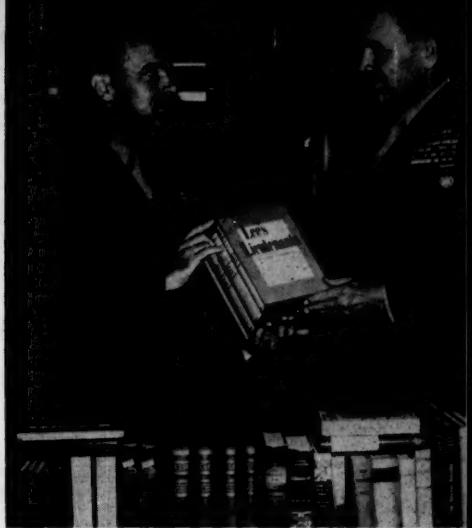
BIGGER AND BETTER might well describe the new chevrons which will soon be issued to Marine Corps personnel.

Stripes will be $\frac{1}{2}$ inch wide as compared with the present $\frac{5}{16}$ -inch stripe. Overall width will be $3\frac{5}{8}$ inches. HQMC cautioned that these chevrons will be available through the Marine Corps supply system only — on about 1 August.

A CONTRACT totaling more than 5 million dollars to develop and manufacture radar installations for 15 major airports stretching across the width of Canada has been awarded to Raytheon.

The radar network will be a major factor in Canadian Department of Transport's comprehensive program of transcontinental airport development and air traffic control. It is aimed at equipping Canada's airways for the jet age. The equipment, designated Airport and Airways Surveillance Radar (AASR) will make it possible to keep aircraft flying between airports under close observation, even in stormy weather. A newly developed system incorporated into the AASR permits the operator to pinpoint the exact geographical location of the plane at all times, by merely flipping a switch to superimpose onto the face of the radar scope an electronically generated map of the territory over which the plane is flying.

KAMAN AIRCRAFT, makers of the synchropter-type rotor helicopter, HOK, recently adopted by the Marine Corps, has announced this airframe has been selected for testing the use of gas turbines in helicopters. The turbine is Lycoming XT-53 "free" type.

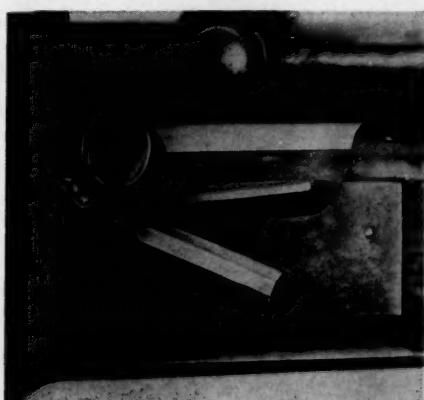


THE NUCLEUS for a new professional library was formed when Col L. C. Hudson, Secretary-Treasurer of the Marine Corps Association (above, left) presented to the Commanding Officer of Basic School, Col L. W. Walt, the first installment consisting of 38 selected volumes of military history, biography and professional books.

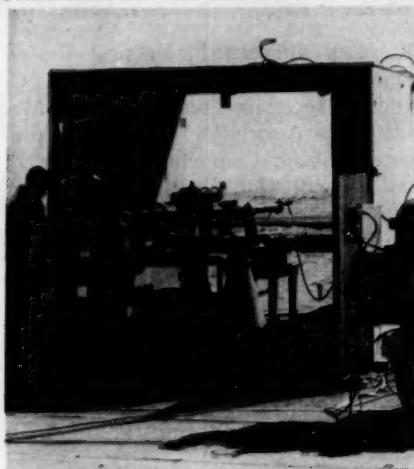
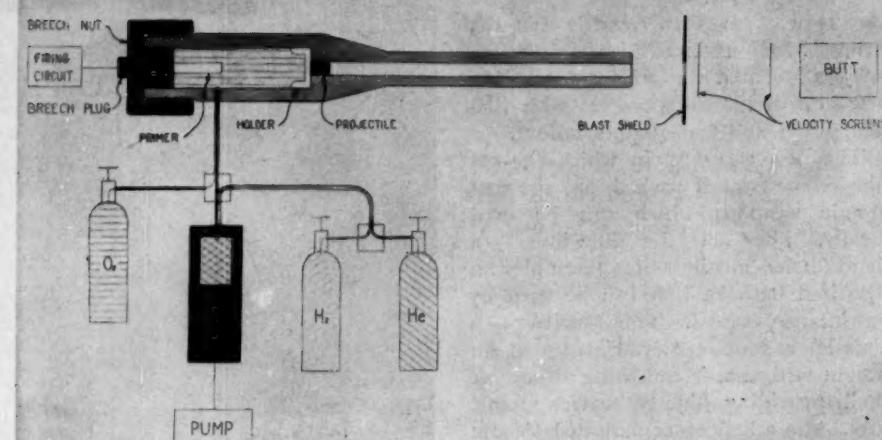
These books and future donations by the Association to the Basic School professional library have been made possible through profits accruing from the sale of Rommel's *Infantry Attacks* (published by the Association) at the Basic School.

THE 1ST PROVISIONAL Marine Air-Ground Task Force is now known as the 1st Marine Brigade — thus carrying a proud name and the fine tradition of that organization, first formed on 1 January 1901, in the Philippines. The name changed at various times during the past, but it has always stood as a symbol of the Corps as a force-in-readiness to meet the needs of the Nation in all corners of the earth.

WITH THE probable adoption of various types of new smallarms in the future, ordnance men may be interested in the "Mirro-Mag" (below) a new device combining a mirror and a magnet to reflect light into inaccessible chambers and bores during inspection.



THE HYPERBALLISTIC GUN



NAVAL ORDNANCE recently announced the development of a 40mm hyperballistic gun (above). It is now undergoing extensive test firing at the US Naval Ordnance Laboratory, White Oak, Silver Spring, Md. The propellant used is helium (steam heated by the combustion of hydrogen and oxygen). This drives the projectile at a speed 17 times greater than the speed of sound. The gasses are loaded from a compressor. Prior to firing, the air is

exhausted from the bore by a system of tubes in order to reduce back pressure and attain greater speed.

The projectile to be fired is placed in the bore, and then a blowout disk is inserted. This serves to contain the gas until the gun is fired and the disk ruptures under high pressure. The firing circuit is contained in the breech plug.

To date spheres, the size of golf balls have been launched at speeds well in excess of 10,000 ft per second.

SAILORS OF BRITAIN'S ROYAL Navy will get a new uniform later this year. A new zippered-at-front coat style jacket is to replace the old jumper blouse. The traditional bell-bottomed trousers will still be there, but they will be fastened with a zipper and have side and hip pockets. The cap also will be modernized, white plastic replacing the cloth of the crown.

ROCKETDYNE — a division of North American Aviation has developed a new static test stand at its Propulsion Field Laboratory located high in the Santa Susana Mountains, northwest of Los Angeles. Here, rocket power developed by guided missile engines is measured to record their thrust and performance. The rocket engines are anchored in huge steel and concrete test stands (right) which must withstand the thousands of pounds of thrust generated.



THE NAVY has announced that it now has a new air-to-surface guided missile in operation with the fleet. A number of patrol-type aircraft are equipped with the missile, which is known as PETREL. Addition of this missile fills out the Navy family of missiles operational with the Fleet and gives the Navy 4 missile delivery capabilities. The air-to-surface PETREL, the air-to-air SPARROW, the surface-to-surface REGULUS and the surface-to-air TERRIER.

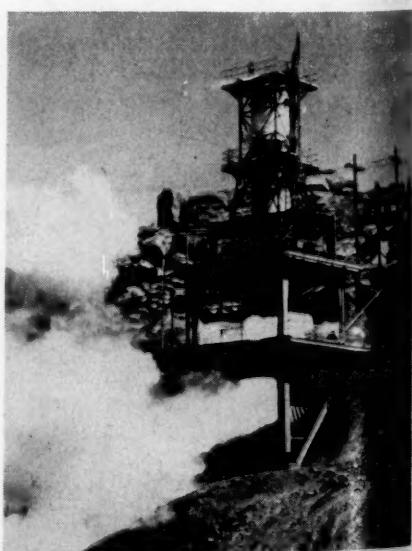
PETREL is designed primarily for use against enemy ships at sea. Launched by patrol aircraft well outside the range of the target's air defense, the missile attacks at high speed with devastating effect. Use of the missile will save the aircraft from the antiaircraft fire which attack planes met in World War II when they closed on the target.

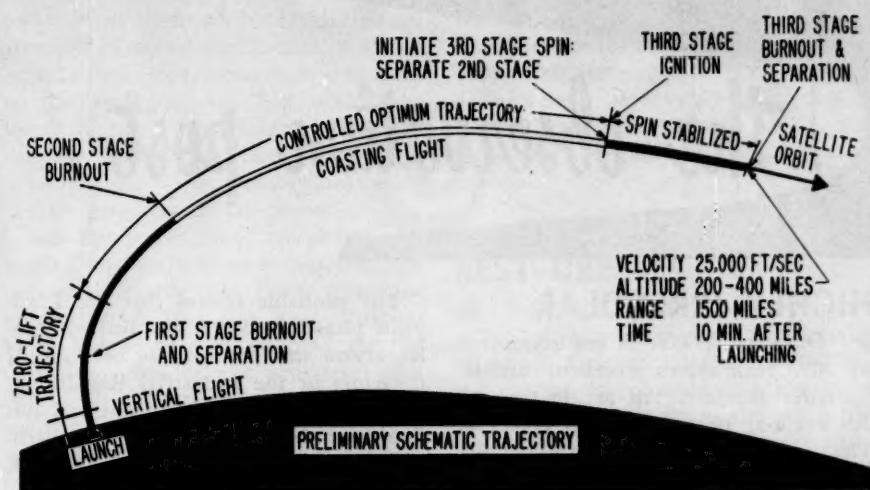
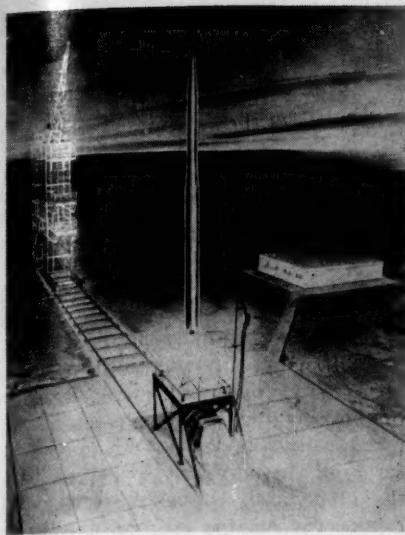
IT HAS COME TO OUR ATTENTION that individuals have received their GAZETTES in various states of disarray. The circulation staff is unable to check each issue since the magazines are mailed directly from the printer in Baltimore, Md.

Anyone who receives a defaced or incomplete copy should notify us immediately, enumerating the deficiencies.

A GIANT CROSS-COUNTRY VEHICLE 174 feet long, capable of crossing deep snow fields and other rugged arctic terrain without reliance on sled runners or mechanical treads has been constructed by R. G. LeTourneau Inc.

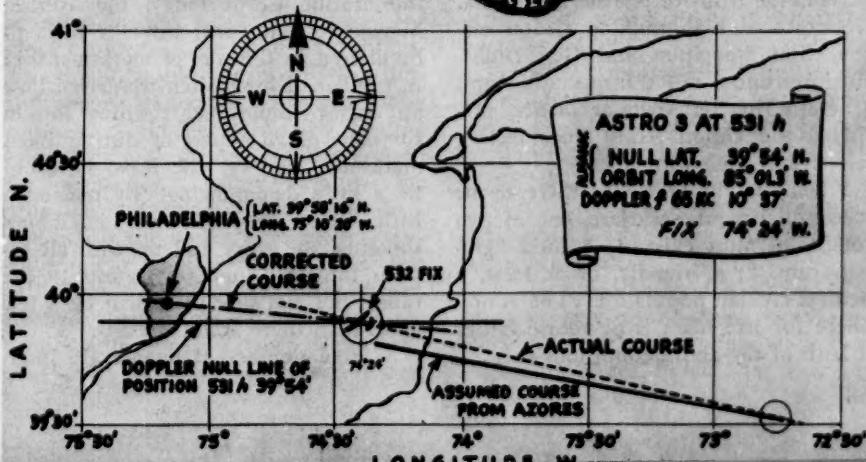
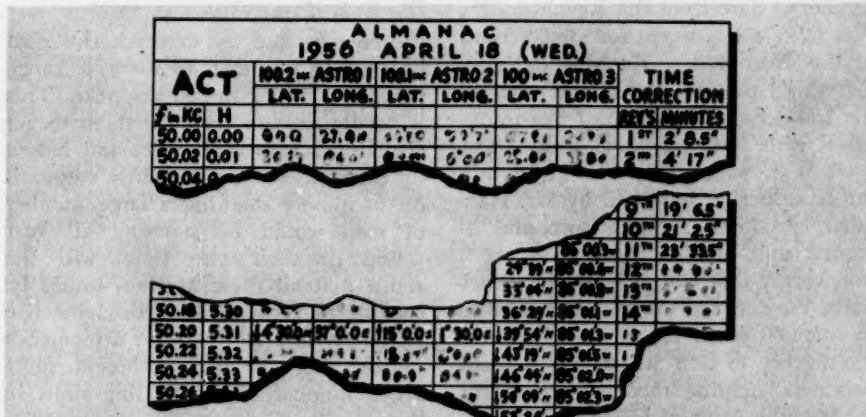
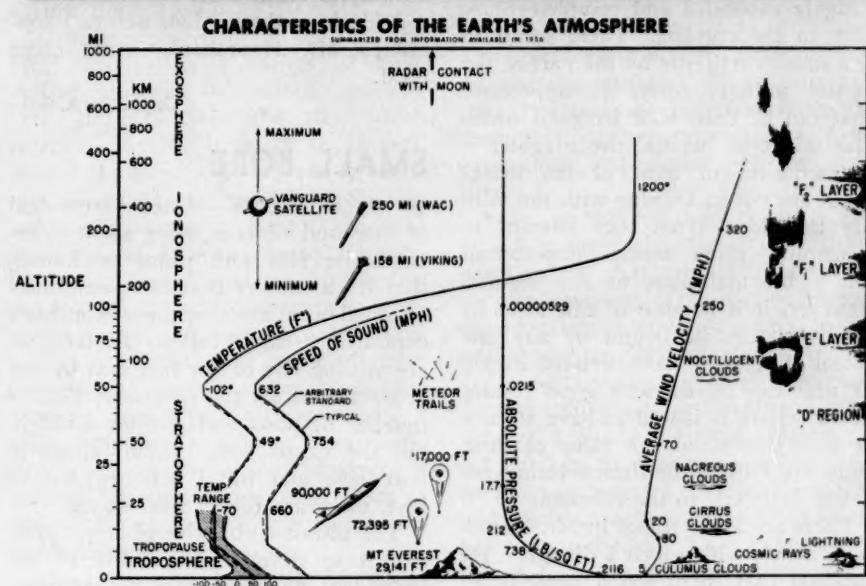
The "Sno-Train" as it is unofficially called, travels on 16 of the largest tires in the world. Ten feet high and 4 feet wide the tires give a high degree of flotation over snow and soft soils. One of its basic missions will be to develop military transportation potentials in the strategic areas of the frozen north.





THE VANGUARD RESEARCH VEHICLE (above) will place the first man-made satellite in its orbit around the earth. Its flight path (top right) should take it through 3 burn-out stages up 200 to 400 miles above Earth. Changes in atmospheric conditions through which the missile must pass are depicted middle, right.

Once in the ionosphere the missile will launch a satellite which could possibly take the form of the ASTRO (Artificial Satellite, Time and Radio Orbit) shown below. One practical use of the satellite is illustrated at right. Three ASTROS would be fired into outer space 8 hours apart to provide radio signals that could be plotted from any point of the earth in any weather every 105 minutes. An almanac, listing the ASTRO's space course, just as a farmers' almanac lists the position of the sun for every minute of the day, could be established by plotting the course of the ASTROS on their first revolution around the earth. This ASTRO almanac would be the key to a navigation system. By fixing the exact minute when the ASTRO signal is strongest, the navigator could obtain its position at that particular minute from the almanac. He would then determine his position by computing the observed Doppler frequency deviation shift minus position distance from the ASTRO.



the observation post

HIGHLY IRREGULAR

OLYMPIA, WASH. A few comments on Mr. Hanrahan's excellent article, *Guerrilla Warfare*. An article such as this has long been due in the GAZETTE. The irregular, partisan or guerrilla unit can be, and has been in the past, a highly successful and complementary force to the regulars. There seems to be a strange reticence on the part of the regular military forces to appreciate what can be done with irregular units. This might be because the irregular is representative of most of the things which are not in keeping with the military tradition. What they attempt to accomplish often seems preposterous and a bit audacious to the regular. However, it is because of this audacity and refusal to be bound by any one system of fighting that a well-led irregular unit can obtain such good results. In any event, it is well to have an article that points out the value of these units, not only to the theater commander but indirectly to the rifleman.

There are a few things in Mr. Hanrahan's article with which I disagree. He indicates that there was a lapse in irregular warfare from the Revolutionary War to WWII (except for some actions in the Near East). He also indicates that this lapse was due to the onset of the Industrial Revolution. I beg to disagree with both of these ideas. The Civil War, which was certainly within the lapse period indicated by Mr. Hanrahan, produced a highly successful irregular unit in Mosby's Rangers. It is noteworthy that Col J. S. Mosby anticipated the deeds of the WWII irregulars by some 60 years. He furnished reliable intelligence to Gen Stuart. He released prisoners, helping them to regain the ranks of the Army of Northern Virginia. He captured high ranking Union officers, Gen Stoughton and Gen Duffie. He interrupted rail transportation and generally, by his irregular tactics, precluded the Union Army from feeling safe within their own lines.

I feel that in order for there to be successful irregular warfare, one of two conditions must exist: 1) A fluid fighting front, 2) a friendly, or at least, a neutral civilian population. The atmosphere for irregulars is of course better if both of the above conditions exist.

The probable reason that the European phase of WWI saw little irregular action was not because of political doctrines or the Industrial Revolution, but because the fighting front was not fluid and there was such a small occupied area that contained a population friendly to either side.

Aside from these minor points, I considered Mr. Hanrahan's article quite good.

Capt John A. Gose

SMALL BORE

QUANTICO, VA.—Since a great deal of time and effort is being spent to re-emphasize rifle and pistol marksmanship it's a wonder that the possibilities of small-bore shooting have not been exploited to their fullest. In fact, we are missing one of our best bets by not going all out for the program. True, a number of posts and stations throughout the Corps have intramural small-bore rifle and pistol matches, but at best, these are highly inadequate.

The ultimate objective of target practice is to develop the ability of the individual and fire units to establish, and then maintain, fire superiority over the enemy. We try to reach this goal by sending our men to the rifle range for a period of 2 weeks each year. This is hardly enough time for them to get acquainted with their rifles and loosen up muscles. With just a little emphasis on small-bore shooting a large number of men would be shooting all year round (in their spare time), with the result that all these Marines would be capable of accomplishing this objective effectively and efficiently at a moment's notice. Let's face it, although there are a number of outstanding shots in the Marine Corps today, the average Marine company still leaves a little to be desired in the way of marksmanship in combat. I have often wondered how an enemy would feel running into a company of all expert or distinguished marksmen. To say the least, it would be a little demoralizing. By placing a little more emphasis on small-bore shooting, we won't end up with all experts the next time we go out to the range, but I'm sure there will be a few more than there are at present.

A large number of people are inter-

ested in this type of shooting but rather than encourage it, it seems just the opposite is true. At practically all posts or stations in the Marine Corps the hardest thing to locate (if one exists at all) is the small-bore rifle and pistol range. If one does happen to exist its use is almost prohibited by the red tape required to shoot on it.

First, arrangements must be made in advance, sometimes a week or two prior to the time you want to use it. Second, a corpsman is usually required to be present before any shooting may commence, and third, an officer must be present making it difficult for an enlisted man to shoot when it's convenient for him. In addition to the red tape, the range itself is sometimes 10 or 15 miles away making it impossible to be used by anyone without his own transportation.

Shooting, like most other sports, is something a person does not plan on doing a few weeks in advance. He usually does it when he has some free time and when it's not too inconvenient to get it done. I'm quite sure there would be fewer people at the local club house if they had to make a reservation to get a glass of beer and it's the same with shooting. Unless the place to shoot is conveniently located and there is a minimum of red tape to go through, people will soon get discouraged and give the whole thing up. My first recommendation then would be to make a small bore-range as available as the local beer garden.

This doesn't necessarily mean the expenditure of a large sum of money. Any building, basement or suitable outside area can easily be converted into a safe small-bore range from old and discarded material. A small expenditure would be required for lights and other incidentals.

The next important step would be the procurement of adequate rifles and pistols. A large number of Marines have at one time or other, prior to entering the Corps, fired on a small-bore high school or college team. This is especially true at Basic School where most students are college graduates. These individuals have fired against some of the best shots in the country and naturally required some of the best equipment. The weapons used in practically all small-bore intramural leagues in the Marine Corps are not suitable for that purpose. True, they can and are being used, but the weapons are not capable of producing scores that people are accustomed to firing. A good target rifle will cost about \$125.00 which is a good deal of money, but unfortunately there is no substitute for good equipment. Since intramural shooting comes

under Special Services it shouldn't be too much of a strain on the budget if a few of these rifles were purchased every quarter till a sufficient number were on hand. By sufficient number, would mean at least one rifle for every firing point available. Practically everyone interested in shooting soon acquires a set of pistols or rifles of his own so the wear and tear on the furnished rifles wouldn't be as great as imagined. Recommendation number two, then would be to make suitable rifles and pistols available.

Assuming that steps one and two have been accomplished the third and final step of providing competition could be inaugurated. This is by far the easiest step, for once the equipment and the place to shoot are made available the program will practically take care of itself, especially in an area where civilian matches are held locally. By having a good intramural and intra-Marine Corps program it would give the shooter added incentive to do good, make the competition a little keener, and help to develop some outstanding shooters for the Corps. The cost of running these competitions would be the cost of ammo and targets. All intra-Marine Corps matches could be postal matches requiring nothing in the way of transportation.

To realize the full benefit of the small-bore program, however, will require that all commanding officers give the program their fullest support.

Once again, to reiterate, we have plenty of people interested in small bore shooting, all that's needed to reap this harvest of outstanding shots is: 1) make the place to shoot easily available, 2) furnish suitable equipment and 3) inaugurate a good competitive program. Not only will we have the immediate benefit of having many more outstanding shots in the Marine Corps for local, national and international competition, but the knowledge gained by these shooters can be passed on to their fellow Marines increasing the efficiency, not only on the rifle range, but in the place that it counts the most — combat.

Capt H. J. Witkowski

THE PIKE'S PEAK

ARLINGTON, VA.—If I may, I would like to comment briefly on LtCol Rankin's excellent brief summary of the history of the bayonet. The needs that weapon met when it was introduced shortly after the middle of the 17th Century, it seems to me, were not clearly brought out in the article — perhaps for lack of space.

To appreciate properly the importance of the bayonet and its role in the history of warfare, it is necessary to

recall how thorough was the change wrought by firearms in tactical doctrine and formations. Clumsy and unreliable as the arquebus and first matchlocks were, they were still potent enough to unhorse, for all time, the knight of the Middle Ages. Thus, the shock of heavy cavalry gave way to fire power.

But fire power alone could not win battles, especially when it was disposed in comparatively thin lines; mass was needed to deliver the final crushing blow and to provide strength on the defensive. Besides, the musketeer was vulnerable, because of the slow rate of reloading, to rapid cavalry charges. He could carry a sword for close combat, and did, but this was hardly protection against the horseman.

These needs were met in the 16th and 17th Century by a variety of long-shafted weapons — halberd, poleaxe, pike, etc. Of these, the pike, which varied in length from 11 to 18 feet, proved the most popular. On it rested the success of the Swiss and Spanish armies of that era, the fame of the Swiss phalanx and Spanish square. Combining the musketeer and the pikemen as the Spanish did, added strength to both, giving to the musketeer the needed protection of the pike and to the pikeman the missile power of the musketeer. Merging these two elements into a single formation as deep as it was wide, with pikes on the outside, produced a bastioned fortress almost impervious to cavalry charge and capable of decisive action at close quarters.

There was one catch: the formation combined two elements unable to act together. The pike was useless at musket range and the musket at pike point. Thus one part of the formation was idle while the other was in action. Fire power and shock action seemed to be in opposition; one had to give way to the other and for the moment fire power seemed the more important. Thus, the influence of the pikeman began to wane and he was relegated more and more to the role of protector of the musketeer.

But suppose fire power and shock could be combined in the same soldier? If they could, then the entire formation could be employed fully at the critical moment in the battle. This was the chief problem of the 17th Century tactician, and its solution produced in turn the swine's-feather of Gustavus Adolphus — a light spear carried by the musketeer and thrust into the ground for protection against cavalry — the plug bayonet LtCol Rankin described, and finally the socket bayonet we know today. The fate of the pikeman was settled; by the end of the 17th Century, he had virtually disappeared from the armies of Europe. Though there were many who mourned his departure and

the loss of the shock action he had given to earlier formation, the musketeer now reigned supreme.

I'm sure I have said nothing LtCol Rankin does not already know, but some of it may be of interest to your readers.

Dr. Louis Morton

BEST DRESSED SERVICE

• SUB UNIT #3, 3d MARDIV — What is he? A Marine, Seabee, Legionnaire or what? I never thought I would see the day when I couldn't distinguish a Marine uniform as far as the eye could see. These were my thoughts recently as I stood on the corner watching the pedestrians drift by at a large Naval base. Does the Marine Corps really have a uniform of distinction any more? Are we actually uniform? This is the first time I've had the opportunity to observe Marines from several different organizations and stations at the same time.

From my observations recently, and especially on this particular day, it appears to me that every CO prescribes his own uniforms. That may be his prerogative, but shouldn't he stick to the uniforms prescribed by the Commandant? After seeing the many differently dressed individuals drifting by, I wondered if I was in the right uniform.

I checked 30 different Marines while standing in front of the Post Exchange, and finally started asking each one where he was stationed. The following is some of various types of dress that I observed and inquired about on this particular day:

1. Tropical uniform, gilt ornaments on collar, barracks cap with tropical cover, black emblem on cap. This Man was from a Marine Barracks.

2. Tropical uniform, gilt collar ornaments, barracks cap, white cover black ornament — same Marine Barracks.

3. Tropical uniform, gilt ornaments on collar, a helmet liner with a red ring around it. Said he was an MP from Marine Barracks.

4. Tropical uniform, gilt ornaments, white helmet liner, black ornaments on helmet which had a blue ring around it. Said he was a guard from Marine Barracks.

5. Khaki uniform, with black collar emblems, barracks cap, with white cover, black emblem, this guy ignored me and my question.

6. Khaki uniform, black emblems, barracks cap, khaki cover with black ornament, double-soled shoes — a sea-going Marine.

7. Tropical uniform, black emblems, barracks cap, with khaki cover and black emblem. This cap had been worked on until it had the old "sea-

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going dip" of 10 years ago — it looked sharp too. This lad was from Marine Barracks, but a different station.

8. Khaki uniform, black emblems on collar, garrison cap, double-soled shoes of about three-quarters of an inch thick. "This is legal," said the Air Wing Corporal, "because it is a full sole, not a half sole."

9. Khaki uniform, trousers without hip pockets, garrison cap, no field scarf, field shoes highly polished, an FMF man.

10. Tropical uniform, made of different material than that I have always bought at QM. Garrison cap, made a little different than mine. The sea going Corporal said it was the new approved material and that he bought it at a QM in the States.

11. Utilities (old style) with tropical garrison cap, field shoes not shined. This man was from a AAA outfit someplace in the Far East.

12. Utilities old style trousers, new style shirt, tucked in, old style utility cap, field shoes polished—a Marine Air Wing man.

13. Utilities, new style trousers, old style jacket, worn outside, field shoes, new style utility cap — Marine Advisory Group.

14. Utilities (old style) new style utility cap, jacket tucked in, field boots

spit shined, trousers boused over boots. This man also had a strip of red cloth sewed on each knee and on his cap, an FMF Marine.

15. Coveralls, Marine utility cap, field shoes—said he was from a Marine Air Wing.

16. Khaki trousers (old style) no pockets, new style khaki shirt much lighter in color than trousers, field scarf about 4 shades darker than shirt. I didn't ask this individual what organization he was from since he had his cap clutched in his hand.

17. Utilities, jacket tucked in trousers, trousers boused over spit shined boots, utility cap. This lad may have been a Japanese house boy, or a wise Private because he answered *Na Ni*.

18. I had just entered the main gate and saw the most disgusting sight ever. A Marine on the front gate in dress blues with a white helmet liner on his head.

After observing this for awhile, I began to ask myself if we really are a uniform organization. These men all swore that the particular uniform they were wearing was the one prescribed for them by their organization commanders. Some said they had to shine their boots, others said they had to "black" them, others said they had to have their shoes double soled at their expense, others told me that they could not have their shoes double soled.

Why gilt ornaments on summer uniforms? This is part of the blue uniform. White cap covers with tropical uniforms should not be. Why does every commanding officer prescribe his own uniform and why, oh why, are we slowly adopting the uniforms of the Army (ie, white cap covers, white helmet liners, new utility jacket). It is hard to recognize a Marine unless you are close enough to see his emblems.

There have been so many uniform changes in the past few years that it now requires 2 or 3 sea bags to transport your gear in. A dozen years ago when I left Boot Camp, I had everything I owned, including a bucket and pith helmet, some 782 gear and two blankets in one seabag. I think this uniform situation has gotten out of hand in the past few years, and we certainly don't have a uniform Marine Corps anymore.

Leave our uniforms alone for a few years and maybe people will begin to recognize a Marine again, and perhaps the Marines themselves will take a little more pride in their organization. Uniforms prescribed should be in accordance with the Marine Corps Manual, the climate and type of work the Marine is engaged in.

TSGT C. W. Ward, Jr.

passing in review

BOOKS OF
INTEREST TO
OUR READERS

Let Sleeping Dogs Lie . . .

YEARS OF TRIAL AND HOPE—VOL. II, MEMOIRS BY HARRY S. TRUMAN—Garden City, N. Y.: Doubleday & Co., 1956. 594 pages, indexed.

\$5.00

"I have often thought in reading the history of our country how much is lost to us because so few of our Presidents have told their own stories." With these sensible and appealing words, former President Truman begins the preface to the second volume of his memoirs, *Years of Trial and Hope*.

In this historic volume (which would, by virtue of authorship, be historic regardless of content), Mr. Truman covers ground which must be familiar to all of us: the turbulent, sometimes groping change from World War II to post-war (one can hardly style it) peace; the world-wide stand against Communist imperialism; the loss of China; unification of the Armed Forces; the battle for civil liberties and the loyalty program; his ding-dong 1948 campaign; and pre-eminent in the volume, the Korean War (where Douglas MacArthur comes in for the full treatment). Altogether a filling menu for those who follow history.

Two themes dominate the book: 1) the ineradicable personality of its author; and 2) the great struggle against Soviet Communism (or more precisely, for honorable world peace) with which Truman will always be associated.

Of the first theme noted above, it is enough to say that no reader will ever accuse this book of having been ghost-written. And what a relief that is in these times when national leaders—particularly military leaders, one regrets to note—seem to have lost their authentic voices and must rely on lesser scribes to say, in their names, what they themselves seemingly cannot. How much better to accept Mr. Truman's often rather flat style, with its insistent use of the vertical pronoun—but at least to know it as his own. Nobody will confuse the author with Winston S. Churchill, but then nobody will mistake him for any other than Harry Truman.

Because the dominant issue of the past decade has been the world struggle against Communism, this second theme appears at every turn. We read the genesis of the Marshall Plan, the preservation of Greece and Turkey, the disheartening loss of China, the incep-

tion of Point Four, and Korea. The last matter occupies 191 pages, or just one-third of the book, and is by far the most important portion of the volume, for it reveals in hitherto classified chapter and verse just how close to disaster we were when the Chinese Communists launched their aggression. It also shows up Gen MacArthur in something less than an adulatory light, not only as a most trying subordinate, but as an extremely poor judge of military intelligence. For example, on 15 October 1950 (the day before CCF units began to cross the Yalu in force) MacArthur was assuring the President and his staff, on Wake, that the chances of Chinese intervention were unlikely, that at most they could get 50-60,000 men into Korea, that they had no air force, and that, in MacArthur's words, "if the Chinese tried to get to Pyongyang, there would be the greatest slaughter." Whether he meant a slaughter of the CCF or the Eighth Army, however, the General did not say.

Mr. Truman's simple, authoritative ring in discussing Korea does not, however, always sound so clear in other parts of the book. On the one subject with which this reviewer can claim more than casual knowledge—the unification controversy—the author resorts to oversimplification, omission of vital facts, and badly supported generalizations, and displays a mind closed *a priori* to any but his own basic solution: "Direct control by a General staff, not a Joint Chiefs of Staff"—in other words, the classic German solution which one would expect so fierce a civilian as Harry S. Truman to abhor. Fortunately, Congress, whom he roundly belabors right often, saw a good deal further into the question and, if unification as it evolved was really needed at all, we may be thankful, on this showing at least, not to have gotten the unadulterated Truman brand.

The book also swipes away at other Truman *betes noires*: the press (often assailed as irresponsible or controlled); partisan members of Congress (usually Republicans, by some quirk of fate); and the Navy, whom, in the persons of admirals, Truman misses few chances to demean. It takes the reader back to his early days in the White House when he is said to have burst out, "When FDR was in here, this place was like a damned wardroom. The Admirals will

never get in here again as long as I am President." And they never did, either.

As a Marine, your reviewer was naturally curious as to how the Corps would fare at the hands of one who was not exactly an admirer of Marines except (in his own widely noted epitome) as "the Navy's police force." Aside from a couple of snide references, one of which lies hard by a particularly sharp jab at Representative Carl Vinson, the rest is silence. From this, you should not necessarily conclude that Mr. Truman has forgotten about the Marine Corps. My own guess is that he felt it safest to leave sleeping dogs lie. If this suits the author, I am quite sure it suits us.

Reviewed by LtCol R. D. Heinl, Jr.

Duty, Honor, Country . . .

JUBILEE—John Brick. New York: Doubleday & Company, Inc. 320 pages.

\$3.95

Captain Jefferson Barnes, United States Army, serving on the staff of the Chief of Staff, Gen Winfield Scott in Washington, DC, in July 1862, is ordered to his home, Highland County, New York, to assume command of the 195th New York Volunteer Infantry Regiment being recruited in that area. Upon arriving home, Barnes is informed that a local politician has taken command of the Regiment and that he (Barnes) can either accept a commission as a lieutenant colonel or return to Washington.

Ever mindful of the West Point code, Duty, Honor and Country, Barnes elects to stay with the Regiment and prepare it for its baptism of blood.

The excellent performance of the 195th New York at Gettysburg, Lookout Mountain and with Sherman on his March to the Sea are a tribute to the outstanding leadership of Barnes.

In addition to recreating life in a Union Regiment of the Civil War period and the battles mentioned above, the author has written an excellent treatise on leadership. The problems encountered by Barnes in his 2-year rise from captain to brigadier general are many. Political officers, friends, relatives and even family, all tied in closely with Civil War regiments, are but a few of the trials faced by commanders of that period—in addition to turning civilians into soldiers. The author's formula for these problems is sound leadership, the

principles involved are all out of the Field Manual, but much more enjoyable reading: 1) Know your job, 2) Set your standards high, and 3) Have the moral and physical courage to back up and carry out 1 and 2.

The author, John Brick, at 33 is one of the youngest and most promising writers of historical fiction in America today. Like all eminent authors in this field, he is careful to use original documents for the source material for his novels. *Jubilee* is the product of months of scholarly research, and is Brick's most important and exciting novel to date.

Reviewed by Capt R. J. O'Leary

A SLAM Study . . .

INFANTRY OPERATIONS AND WEAPONS USAGE IN KOREA (Winter of 1950-51) — BrigGen S. L. A. Marshall, Chevy Chase, Md.: Operations Research Office, Johns Hopkins University. 142 pages, illustrated.

Correct weapons usage is not finally the product of perfecting ordnance and tactical techniques, but of imbuing men with a spirit which will make them wish to move and fight together as a team. So long as that spirit is present they will do their work with any weapon, even to crossbows and billhooks. As more complex machines and methods are evolved, they will learn to master them in the interests of the common purpose.

The key to the recovery of the Eighth Army after the withdrawal before Communist Chinese Forces in December 1950, was the revival of the spirit of the *good company* — an intense pride in the unit — the feeling that one company was superior to another and could prove it when the lead was flying. Good weapons usage and the tightening of tactical arrangements became the inevitable by-products of this revival. They did not make it; cause should not be taken for effect.

Units which spoke with greatest pride and enthusiasm about what they represented as a company, and how they rated themselves with respect to friendly competition, were also the best composed in battle, the most efficient operators, the ones with the lowest rate of overall weapons difficulty. Pride in company and pride in regiment were more to the fore in the American soldier and Marine in Korea, than in either World War. There was relatively less interest in loyalty to the division. Perhaps this is consistent with the conditions of the Korean War, but because of its obvious effect on the infantryman it is deserving of thoughtful and careful analysis. In the judgment of BrigGen Marshall, the great lessons of the first

winter in Korea were in the moral, rather than in the material sphere.

Infantry Operations and Weapons Usage in Korea (Winter of 1950-51) is a detailed and accurate commentary on the behavior of men in the use of weapons, of the behavior of weapons as men use them, and the use of information in the augmentation of fighting power. This commentary does not reach back to the initial period when troops were green and our commitments so limited that there was seldom a chance for an equal fight on local ground, nor does it extend into the period when the fronts became stabilized and pure defensive actions ensued. It focuses entirely on the campaign of the first winter of the Eighth Army. This period provides the best opportunity for the profiling of infantry weapons, tactical and leadership values in combat against a background of training methods and the armament programs. For it was during this period that the Eighth Army experienced its greatest and most prolonged stress, both under offensive and defensive conditions. The first draft of this report was studied and criticized by 43 commanders who successfully led troops in the campaign of the first winter. Their comments provide the meat of the discussion as presented and furnish the basis for the conclusions reached in the commentary.

The commentary is divided into three main parts, *Operations, Weapons-Use and Usefulness* and *Communications and Information*. To all infantrymen who served in Korea during the period covered by this report the comments of the general failure of carbine as a combat weapon; the success and failure of certain lubricants and lubricating methods for weapons in cold weather; the almost universal statement that the BAR (in spite of its weight and clumsiness) was the mainstay of the rifle platoon in the attack and defense; the use of the grenade as an offensive weapon; the necessity of keeping some kind of *positive* communications with higher echelon; and the use or non-utilization of the bayonet as a weapon of close combat, will strike a familiar and interesting note. Such comments are, in the main, those heard daily by the soldier and Marine who fought the CCF and NKPA during that first winter.

Of interest to Marine Corps readers are certain allusions to the 1st MarDiv and its reactions, as a unit, to certain aspects of training, leadership and weapons usage. General Marshall's comments on training, which indicates that the indoctrination of the infantryman should include no less than 95 per cent tactics, weapons and the knowledge of human motivation, are also of interest.

His closing words "That when the unit is sound within, when it achieves a feeling of organizational solidarity because its leaders have mastered their professional tasks, and the group feels confident to stand together in the ultimate emergency of war, it is then receptive to whatever leadership has to say about the cause of the country, the democratic ethic, and the individual duty," should keynote American military thinking and training methods in the days that lie ahead. *Infantry Operations and Weapons Usage in Korea (Winter 1950-51)* provides those who were there at the time with a complete review of the problems which they sought to solve, and furnishes others with information and means with which to cope with similar problems when they arise again.

Reviewed by Maj G. P. Averill

Of Interest to Aviators . . .

AIRCRAFT TODAY — Edited by John W. R. Taylor. New York: Philosophical Library, Inc., 1956. 96 pages. \$4.75

Aircraft Today is an extremely readable collection of factual articles covering a major portion of the over-all field of aviation endeavor. It contains sufficient meat for it not to be boring reading for the aeronautical engineer, yet is written in terminology familiar to the layman.

The editor leads off with a review of world aviation which covers research projects and military and civil aviation progress through 1955.

Next is a very interesting treatment of the subject, "What Do We Know About Russian Aircraft?" Basic characteristics of the various model aircraft in the Soviet Air Force are set forth and the code name system worked out for them by the Allied Forces is explained.

There is an article on seaplanes entitled, "Swan-Song of the Flying Boat" and a most informative article on missiles entitled "How Near Is Push Button Warfare?"

In one of the articles the reader is afforded the opportunity of accompanying a test pilot on a test flight and looking over the pilot's shoulder while he executes a landing aboard an aircraft carrier.

In all, there are 14 articles in the book, none of which are a waste of words. If one must be singled out as being better than the rest, however, I believe "Shortening the Take-Off" would get the nod.

As the title implies, all possible ways of decreasing take-off run of aircraft are examined, up to the ultimate innovation of eliminating take-off run entirely. The author sticks pretty close to hardware flying today or that which is just

around the corner, steering well clear of Buck Rogers designs.

The principles of fixed-wing aircraft employing flaps and boundary layer control are explained. Most of these aircraft are in the Short Take-Off and Landing (STOL) category. In the Vertical Take-Off and Landing (VTOL) category, the whole spectrum of possible designs is examined from rotary wing helicopters and convertiplanes to wingless airplanes.

The book has an attractive display of pictures and charts; an article on "RAF Squadron Insignia" is illustrated in natural color.

Aircraft Today is the second edition of a book which is to become an annual publication. It is especially recommended for those who have an active interest in the happening within the aviation world, yet find themselves with insufficient time to wade through the various periodicals on the subject.

Reviewed by Maj A. J. Clapp

Murder and Mayhem . . .

KILL OR GET KILLED—Manhandling Techniques for Police and the Military—LtCol Rex Applegate, USA (Ret). Harrisburg, Pa.: Military Service Publishing Co. 327 pages, illustrated. \$3.00

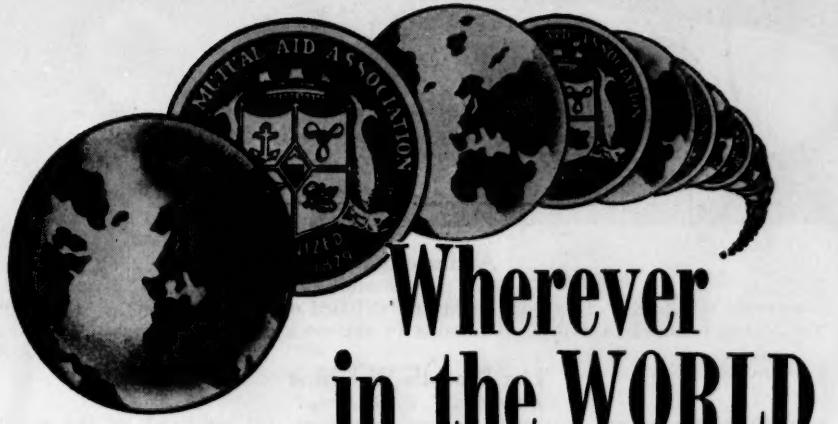
The first words in the publisher's foreword are: "Human Life is precious." The succeeding pages are dedicated to the various methods of snuffing it out, swiftly and with as little effort as possible. Not a new book, but the third edition of LtCol Applegate's 1943 version broadened to cover the civilian law enforcement field as well as the military. Profusely illustrated, its main subdivisions cover Unarmed Combat, Offensive and Defensive; Knife Attack and Defense (with a practical problem for assassins); and Combat Use of the Hand Gun. Also dealt with are Combat Firing with Shoulder Weapons; Disarming; Prisoner Handling; Miscellaneous Weapons and Techniques and; Raids and Room Combat.

None of the material in this book is new or particularly unique to the military. However, its value lies in a rather skillful compilation of the various techniques employed in the field of justifiable homicide and mayhem. As such, the plot is rather thin and like all textbooks, cannot be absorbed in one evening. An excellent instructional guide, it cautions—"No text, no matter how well illustrated or clearly explained can, alone, teach a man to fight. The techniques . . . can be learned easily and applied quickly and instinctively, but only after adequate practice."

Recommended for every Marine's library.

Reviewed by Maj D. H. MacDonnell

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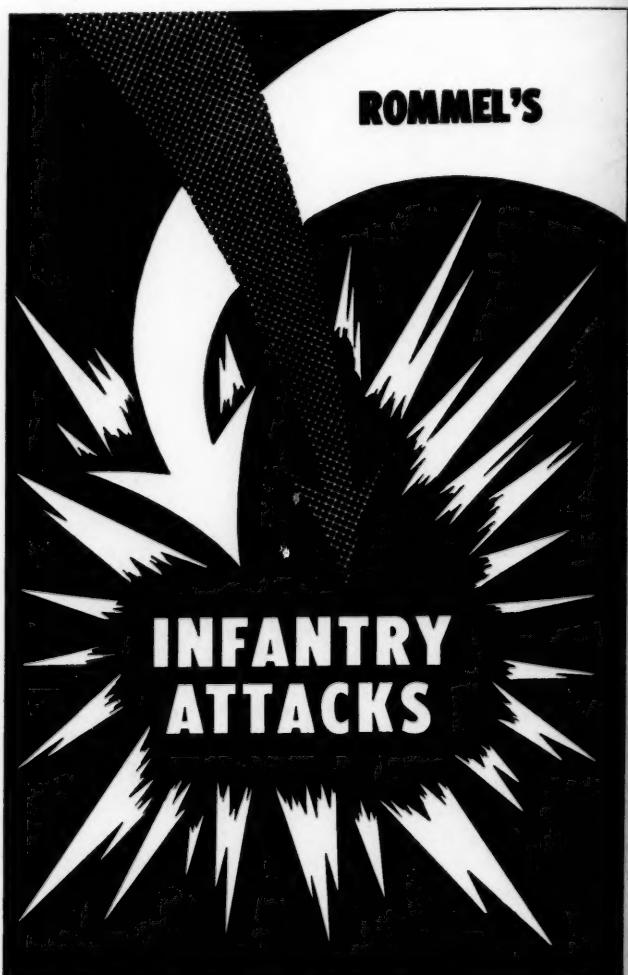
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